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# THE JOURNAL OF THE

## TENNESSEE MEDICAL ASSOCIATION

### MID-SOUTH POST GRADUATE MEDICAL ASSEMBLY

Seventy-Seventh Annual Meeting

February 9-10-11, 1966

Peabody Hotel Memphis, Tennessee

### TMA STATE AND COUNTY SOCIETY OFFICERS CONFERENCE

Hermitage Hotel—Nashville

February 27, 1966

### TENNESSEE MEDICAL ASSOCIATION

131st Annual Meeting

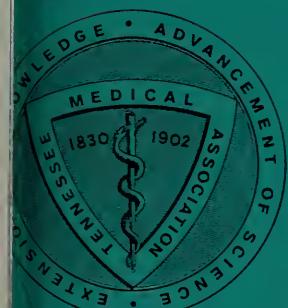
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# JANUARY 1966

Volume 59

Number 1



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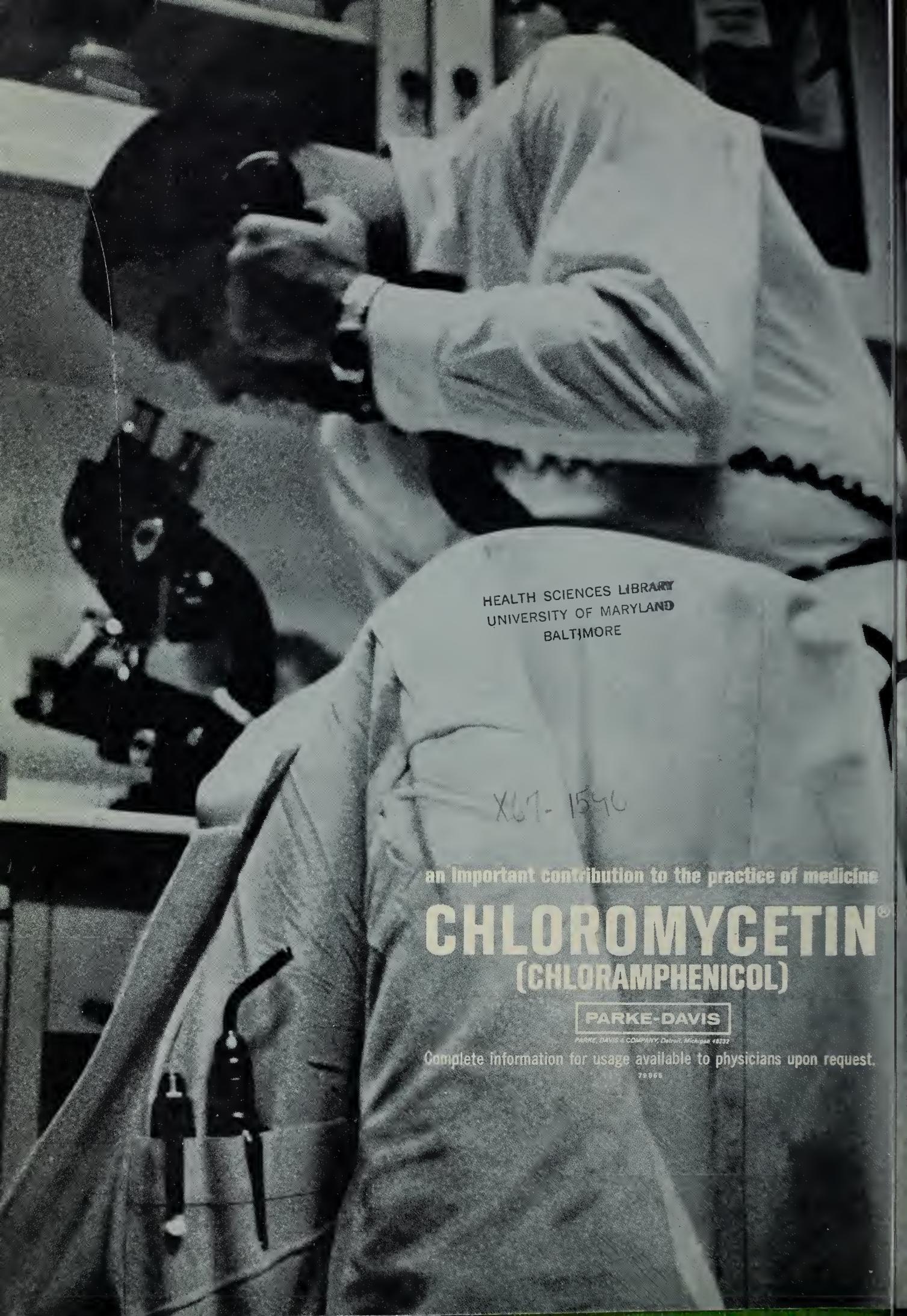
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- (1) Frykman, H.M.: *Minn. Med.*, Vol. 38, Jan. 1955. (2) Poth, E.J.: *The J.A.M.A.*, Vol. 163, No. 15, April 13, 1957. (3) McGivney, J.: *Texas State Jour. of Med.*, Vol. 51, No. 1, Jan. 1955. (4) Stern, F. H.: *Jour. of The Amer. Ger. Soc.*, Vol. 11, No. 3, Mar. 1963. (5) Weekes, D. J.: *N.Y. State Jour. of Med.*, Vol. 58, No. 16, Aug. 1958. (6) Abbott, P.L.: *Jour. of Oral Surg., Anes. & Hosp. Dental Serv.*, Vol. 19, July 1961. (7) Weekes, D. J.: *E.E.N.T. Digest*, Vol. 25, No. 12, Dec. 1963.

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## Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville 12, Tennessee.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

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R. H. KAMPMEIER, M.D., Editor

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# Journal of the Tennessee Medical Association

## OWNED AND PUBLISHED BY THE ASSOCIATION

VOLUME 59

JANUARY, 1966

No. 1

For the many Vanderbilt Alumni and for the records of medical history in Tennessee it is fortunate that this story will become one of permanent record. The recollections and reminiscences are those of one who early became identified with the School, shortly after its reorganization, and had much to do with its policies in subsequent years.

## Vanderbilt—Yesterday, Today and Tomorrow\*

JOHN B. YOUNMANS, M.D., Nashville, Tenn.

When Bill Meacham asked me to give a talk at this alumni reunion, the subject was to be "the good old days." This suggested a rambling discourse, filled with anecdotes, character sketches, happy and unhappy reflections and a good many lantern slides of faces of the past. Later I found out that the subject was to be Vanderbilt Medical School—Yesterday, Today and Tomorrow. This, of course, changed the complexion of things entirely. To begin with, the inclusion of today and tomorrow adds so much that time would not permit the kind of talk about the good old days I had intended. Second, and more important, it immediately brings up the matter of comparisons.

Comparisons put one in a difficult position, especially an oldster who is no longer on the scene and involved in the work and responsibilities of the day. His views of the past are seen as indicating a belief that the good old days were better than anything can be in the present and future. His criticisms of the present are attributed to his inability to accept anything new and different from the past. Actually, aside from the pleasure of reminiscing, the value of the past is in extracting from it lessons which may add to the conduct of the present and plans for the future. For my purpose, we can divide the past into three periods. The first is from 1925 to 1940 which I shall call the "good old days." The second is from 1940 to 1950. The third is from 1950 to my retirement in 1958. The present may be designated from 1958 to now. The future lies ahead.

Progress in science, in medicine and med-

ical education, indeed as in most human concerns, progresses unevenly, by waves, by advances followed by static periods or even by regression. While progress is continual it is not continuous. It has the characteristic of the reactions to a stone dropped in the mill pond. A disturbance in the placid surface of affairs starts a wave which spreads in ever widening circles until finally its momentum fades into infinity leaving for practical purposes a state of calm. Or, to use a more physiologic simile, the steady state of Cannon.

The stimulus to disturbances in the status quo of medical education, is usually a new scientific discovery, a sudden change in environment, a person or a concept, and often a person with a concept. Sometimes it is political or social rather than scientific and such was the nature of the stimulus which resulted in the reorganization of the Vanderbilt Medical School, which is the point at which I must begin my memories of the "old days."

### The "Good Old Days"

The stimulus which resulted in the reorganization of the Vanderbilt Medical School occurred in 1910, some 15 years before the reorganized Vanderbilt Medical School opened its doors to the admission of students, although the beginnings of the reorganization had begun some 5 years earlier. The stimulus was, as all of you know, the Flexner Report, published in 1910. This was the work of one man and represented in essence a socio-political force affecting medical care, medical practice and hence medical education. However, and this is important in view of the modern tendency for politicians, educators and the public gener-

\*Presented at Vanderbilt University Medical Alumni Reunion, June 5, 1965, Nashville, Tenn.

ally, to see little or nothing of good in the organization, it was the American Medical Association which initiated the movement on the basis of which the Carnegie Corporation became interested and obtained the services of Dr. Flexner.

The effect of the Flexner Report was to close more than half of the medical schools and cause the reorganization and elevation of the remaining schools to an acceptable standard. This was not easy, however, and in many cases it was touch and go. Generally, the deciding factor was the underlying strength of the school in background, tradition, existing support, ideals and concept, and often, above all, the foresight, vision, determination, dedication and persistence of one or more leaders.

Such was the situation at Vanderbilt. Many, perhaps most of you know the story. Vanderbilt and Chancellor Kirkland had long had a great interest in medical education and a medical school. This was based largely on the long tradition and reputation of Nashville as a strong medical center. Vanderbilt had already undergone two previous reorganizations, each a step in the direction of excellence, each incomplete but each marking a gain. The last had occurred only some months before that of 1920-25. This interest and effort was, in fact, an important reason why the Rockefeller, Carnegie and other institutions selected Nashville and Vanderbilt as the site for the development of a modern, advanced medical school in the Mid-south. In Chancellor Kirkland they had the man with vision, determination, ideals and persistence.

The major problems were two. The first perhaps was money (buildings), but second and equally or more important was the acceptance of a concept and plan of medical education which included among other things at least a core of full-time faculty in the clinical subjects whose compensations would be from university salaries and not income from practice.

As all of you know, Chancellor Kirkland was successful in raising the money. It was not done all at once, however, and several years were consumed in negotiations, with changing plans and goals as these went on. However, by 1920, sufficient funds for the

plans then adopted were in hand and Chancellor Kirkland was ready to go ahead.

Wisely the first step was the selection of a Dean. The man selected was Dr. G. Canby Robinson, then Professor of Medicine and Dean at Washington University Medical School in St. Louis.

Dr. Robinson was a product of the Johns Hopkins, the Pennsylvania Hospital and the Hospital of the Rockefeller Institute with a year or more of work in Europe. He came to Vanderbilt from the Washington University School of Medicine, St. Louis, where he had gone as an Associate Professor of Medicine in 1913. There he participated in the reorganization of that School and was successively Professor of Medicine and Head of the Department, Acting Dean during the war years (World War I) and then Dean.

Dr. Robinson energetically began planning for the physical plant and for a curriculum, a program of instruction, a faculty and hospital facilities. It was here, however, that Dr. Robinson exhibited more vision, and I might say more determination, than Chancellor Kirkland, the greater vision undoubtedly because of his greater professional knowledge of medical education and the more determination in this instance because he won over the opposition of both Chancellor Kirkland and the financial interests backing the new school. Asked to propose a plan to obtain best the objectives of the project, he came up with a bolder, broader, more complete, more far reaching and much more expensive plan. It was the one finally adopted, and the one as we know it today, with the transfer of the School to the West Campus, the abandonment of buildings on the South Campus, including an uncompleted new hospital, and the provision of a new university hospital to be an integral part of the medical buildings. The general architectural nature of the original new plant, with particular respect to function, was the result of Dr. Robinson's ideas. Pencilled sketches of his have been preserved and have been on display in the library at times. The distinctive features as seen then were the unitary construction of medical school and hospital with departments, wards, outpatient, library, and administrative space, all designed from a

functional point of view. Because many changes have occurred it may be of some interest to relate a few examples. The library was placed as centrally as possible. The preclinical departments of Biochemistry, Physiology and Pharmacology connected directly with the medical wards on two floors, with the offices for the full-time staffs of medicine located between. Those of Anatomy and Pathology had the same relation to the surgical wards and surgical staff. It may be noted here that Bacteriology, now Microbiology, was a division of Pathology and Pediatrics a division of Medicine. Obstetrics and Gynecology were located in another wing. An obvious error of omission was the lack of beds for colored patients, a defect which was remedied by changing the proposed isolation and infectious disease unit to a negro ward. A small facility for private patients was provided in one wing, and elegant, for that period, house staff quarters were situated in the general administration area of the building. It may be noted that an error of commission, attributable to the northern experience of the architects, was the inclusion of so many radiators but that most of them were cut off from the very beginning.

The Hospital with its 180 beds, arranged for the most part in four newly designed wards each with 4 semi-separated units of four beds each, and separate rooms of 1 to 4 beds for special purposes, provided for medical, surgical, obstetric-gynecologic and pediatric patients. Some 16 beds for colored patients provided for all services, and there were approximately 16 beds for private patients of all services.

With its clinical laboratories under the charge of the related department heads, with new and latest equipment, many innovations in the various service areas, an adequate operating room suite and animal quarters on the top floor, the Hospital provided a facility commensurate with the aims and plans of the new school. Its superintendent was Mr Clarence Connell, a Nashville engineer, who had been involved in the planning and building of the Hospital. The assistant superintendent was Miss Augusta Mathieu, a nurse who had hospital administration experience at Barnes Hospital.

There was a social service department of three members, with Miss Nairns as director, and an excellent Library. The Librarian was Mrs. Pearle Hedges, Susan Wilkes was medical illustrator, and the Registrar was beloved Mrs. Bromwell (Miss Annie). The Superintendent of Nursing was Miss Brodie and the nursing staff was composed largely of pupil nurses.

All in all, the plan was a success. It did provide for close relationship of functions and personnel and contributed greatly in my opinion to the closely knit, integrated and coordinated mechanism or organization in medical teaching, as well as medical care and research, for which it was designed and for which it represented a new concept. Educationally the reorganization was marked by the appointment of an almost completely full-time core clinical faculty and by the adoption of a university style of program of instruction and curriculum, and politically by a drastic change in status, in image making and in public relations both within the profession, the university and the community generally.

These things having been decided, the new Dean set about securing a faculty and building a curriculum. It is here I believe that Dr. Robinson made his greatest contribution and here that he exhibited his greatest talents as an educator. There had been a voluntary resignation of the whole existing faculty to facilitate the reorganization. Some of these at least could be considered as eligible for appointment to the new full-time places and more generally for part-time, non-salaried clinical positions. Relatively few, in fact only one, was appointed in the first category. This is understandable. To a group which for the most part were loyal, devoted teachers, serving with small or no pay, dependent on their practice for a living, little inclined to the teaching pattern of the new curriculum and relatively little interested in research, particularly the intense, laboratory type of research expected, the attractiveness of such a place in the newly reorganized school was not great. Undoubtedly, there was also an element of resentment toward the new order as might be expected. In any event, only one appointment was made

from the existing faculty. Seventeen new appointments were made in the rank of professor, associate and assistant professor with 8 of the professors as heads of departments and 2 associate professors as head of divisions. On the preclinical side all were the full-time salaried as would be expected. Of the full-time clinical faculty it understood, first, that they would confine their practice to the Hospital and second that they would be so occupied with teaching and research that they would have little time or inclination for private practice. According to Dr. Robinson as stated in his autobiography, this is what happened and I can confirm this for the period of what I have designated the good old days.

As many of you know the appointments of the "original" group were made a year or so in advance of the opening of the new school and they with their families were given a fellowship for a year of foreign travel and study before assuming their duties. I was not in this fortunate group not being a member of the original group and coming to Vanderbilt in 1927—two years after the reorganized school opened its doors.

Some notes concerning the new faculty may be of interest. For the most part they were graduates of two schools, Hopkins and Harvard and some had had experience at both. Though graduates of these schools, many, of course, came from other places where they had gone after graduating. Dr. Barney Brooks brought a contingent from St. Louis which included two soon to become executive heads of divisions of G.U. and E.N.T.—Drs. Guy Maness and Edward Barksdale. In addition, the assistant superintendent of the hospital and the chief admissions clerk came with Dr. Brooks from St. Louis. The resident in surgery, however, was Dr. Blalock from Hopkins. For medicine, besides Dr. Robinson, there were Drs. Sidney Burwell and Hugh Morgan. Again the medical resident was a Hopkins graduate, Dr. Tinsley Harrison. There were no separate departments of Pediatrics and Bacteriology. Dr. Casparis, another Hopkins product, headed a Division of Pediatrics under Medicine, later to become a Department. Obstetrics included Gynecology and

was headed by the only part-time department head, Dr. Lucius Burch, the former Dean. Psychiatry, as was Pediatrics, was a Division of Medicine. All of the medical and surgical specialties were headed by part-time clinical professors.

In the preclinical faculty, Anatomy was in charge of Dr. Sidney Cunningham from Mall's Laboratory at Hopkins. As evidence of the new nature of the curriculum, Dr. Cunningham did not teach gross anatomy, but instead histology and did research in hematology. Dr. Goodpasture, returning to his native state, was head of Pathology and here again, his emphasis was on viral disease rather than on gross pathology. Bacteriology, under a non-M.D., Dr. Neill, was a Division of Pathology. Biochemistry was in charge of Dr. Glen Cullen, a Van Slyke associate. It had been planned to have Pharmacology taught in Physiology with a single head, although the original building plans showed space for both and mentioned separate departments. For this purpose, a clinical cardiologist, Dr. Frank Wilson of Michigan, was offered the position. He and Mrs. Wilson came to Nashville in December of 1926. They were met by Smoky Joe at his best. The curtains in the home where they stayed were stiff with soot,—it happened in the best of homes then. The Cumberland overflowed its banks even interfering with train travel and there were no airplanes. The Wilson's decided not to accept and the post was filled by Dr. Lamson, a product of both Harvard and Hopkins.

The first three graduating classes were those which had had some of their teaching in the "old" school, which caused a somewhat uneasy situation. This was particularly true of the fourth year class which were placed in a quite different environment for which they had but small preparation and they also had some of the same feelings as their previous faculty. For the subsequent two classes the situation was easier but not until the first full fourth year class graduated was the full effect of the new school felt. I had in the outpatient the last class which had been on the South Campus. The days of the transition were in the time of the Benzene Ring—a racket which was concerned with the clandestine

sale of examination questions of the State Board of Licensure and although not primarily a Vanderbilt group, indeed it involved all schools in Tennessee, it did have an influence on the moral and intellectual tone of the school. The new faculty were instrumental in breaking up the "Ring" and it is interesting that later the preclinical faculty, especially Dr. C. S. Robinson, played a large part in implementing Tennessee's Basic License Law.

It is pertinent to note in this connection that the newly reorganized school operated on the honor system from the beginning. It was in my view, highly successful. As a Dean and as an administer of hundreds of examinations, as one who taught three classes each year and was with students almost every day for 17 years, I believe it was an eminent success. Those instances, and there were a few, in which problems arose were handled judiciously, fairly, promptly and decisively with a minimum of fuss, publicity, argument, or involvement of the faculty and the administrators.

The first decade of the new school's existence rapidly established its firm position as one of the outstanding schools in this country. This was shown in the following ways:

1. The quality of intern and residency positions open to its graduates and their records of accomplishment.
2. The reputation of the schools and its hospital as a desirable place for internship and residency training.
3. The school's ability to attract additional faculty of excellent quality.
4. Source for positions elsewhere.
5. The quantity and quality of its research output.
6. The membership of its faculties in learned societies and their participation in committees, conferences, commissions, and the like at national levels in matters of highest medical and health importance.

In 1935, nine years after the first class graduated from the new school, the intern record stood as follows: Thirty of the class had internships in university teaching hospitals and one had gone directly into teaching and research. One evidence of the level of professional ability and accomplishment is the publication of scientific articles

in recognized journals. Though deficient in many respects, and subject to misinterpretation as a criterion, it is used everyday in assessing the ability and standing of even the highest grades of academic and scientific personnel. Of the 475 graduates of the first 10 years, 109 or 25% had published work by the end of that period. This included 13 in the class of 1926, 10 in 1927 and 15 in the class of 1928. Even more noteworthy as perhaps indicating the increasing influence of the new program of instruction, 32% of the classes of 1930, 31, and 32 had published one or more papers by 1935—2 to 5 years out of school. Many of course had published many more.

One of the criticisms and fears of the new school, its program, methods, and faculty was that it would produce a high percentage of ultra-specialists, research workers and teachers as compared with practitioners, especially general practitioners. The figures of the first 10 years are enlightening. Of the 495 graduates, 29% were in general practice, 40.4% were in general practice or general practice with a special interest in a specialty. Thus, nearly one half were in essence in general practice. Of the remainder, 41% had limited themselves to a specialty, 6.1% were in institutions (some teachers) and only 1% were listed as in research. (Ninety-one were in towns of less than 2500 and 104 in towns of 100,000 to 250,000.)

The original full-time faculty of the reorganized school at the rank of assistant professor and above numbered 19. By 1936, 8 including 4 professors and heads of the departments and the dean, had left, presumably for greener and more prestigious fields. On the other hand, by that time (1936) 33 new persons of the same ranks had been added, 16 of whom came from without the school, 17 from their own ranks. Only one of the 16, however, was a professor and head of a department, the other vacancies of department heads having been filled from within.

During the year 1925-26 the 19 full time faculty members of professorial rank published 27 research papers. In some of these, of course, younger members were included as co-authors but for the most part

the publications represented actual "bench" research on the part of the sole or senior author. By 1935, a similar faculty of 42 members had 142 publications including one book during the year.

One of the features of the period "the old days", which should be stressed was the cooperation between departments and the personnel of these departments. What is now called multidisciplinary approach was common. As evidence of this there were 14 papers from two or more departments in 1934-35. The departments most often found participating jointly were Anatomy, Biochemistry, Medicine and Surgery in various combinations.

As for membership of the faculty in learned societies, we may take, for example, membership in the Association of American Physicians, a national society of internists primarily engaged in teaching and research and limited to some 200 active members. Of the 9 full-time faculty of assistant professors and up, 7 were members by 1940. Of the approximately 82 eligible faculty to 1964, 7 are or have been members. I have used this example because it is one with which I am familiar. Undoubtedly, much the same was true for other disciplines.

These things did not just happen. They were the result of a strong curriculum and program of instruction, a strong, hard working faculty exhibiting a high talent for teaching and a continued and sustained interest and productivity in research. The result of their work, their professional and scientific contacts and standing, opened the doors for their students who in turn met the challenge. Their research earned them a high standing in their chosen fields. It is worth noting that these things were accomplished without the aid of government or "third party" support. Of this I shall have more to say later but it is noteworthy that the bulk of research was supported by departmental budgets. Admittedly the cost of research was much lower.

The School of Nursing was to go through much the same kind of reorganization, but later and more gradually. A training school in 1925 (there had been one since 1909), it became a non-degree university school under the Hospital; a degree school

and final separation from the Hospital was reached in 1930. Though the ultimate result was good, the concept was more difficult to accept than in medicine and a push for too much too fast, coupled with some clumsiness in relations, caused similar unrest and problems. These were greater within the institution, but were felt in the community and added to the problems generally. Growth continued, however, and the School of Nursing became, as the Medical School, a distinguished school internationally as well as nationally.

Interestingly, the first warnings of impending trouble came in one area which represented some of the more striking innovations—the Hospital. It began with the great depression but not until some two or three years after its start in 1930, and was of course related to a shortage of money. Originally, the charges for indigent patients in the outpatient and wards had been negligible or nonexistent. The only laboratory charge was for x-ray and this was minimal. There was a registration charge of a quarter or so for the outpatient registration and some effort was made to collect for hospital costs but in effect the service was free. The medical school's endowment footed the bills.

As the problem increased, services were restricted, the number of beds open to non-paying patients was reduced, admissions were restricted during the summer, greater efforts to collect were made, charges were increased, and the faculty took a cut in salary. Incidentally, this was never restored. Subsequent increases were simply raises over the existing reduced salary.

Although the reduction in services with its consequent effect on teaching (and on some research) was disturbing, even more significant and important was the effect upon the method of compensating the clinical faculty for its services, a break in the essentially full-time salaried status of the clinical faculty. Under the pressure of circumstances, the legitimate requests for greater salaries in the face of inadequate budgets, the policy of geographic full-time was adopted. However, its greatest fault was not the fact of private practice itself—I am one who believes that a suitable and

satisfactory arrangement can be made, in fact, is in general desirable,—but that it was introduced on an individual, spotty, unplanned basis with no general policy, rules or procedure. The preclinical faculty were, of course, almost completely excluded. From this beginning the practice spread to involve a large proportion of the faculty by 1950.

It was at this time perhaps that the one serious defect in the reorganization of the school became apparent. It failed to obtain a large measure of community support. To a considerable degree this reflected a basic relationship, or lack of it, between an indigenous society and one foreign to the region and superimposed on an existing situation. With the best intent in the world and truly accepted as a generous, welcome, and prideful beneficence, the reorganized school nonetheless had the stigma of an outsider, something to brag about to the world but subject to a certain lingering resentment at home.

In any event one significant lack or sin of omission in the reorganization of the medical school was the failure to win the whole-hearted, sympathetic support not only of the medical community but of the community as a whole.

The blame for this must rest partly on the shoulders of Dr. Robinson. It was, however, not a failure of the heart or the interest, but rather one of a personality which was not adapted to establish in the university as a whole and, certainly not in the medical community, a feeling of togetherness and selfless cooperation. No more kindly, well disposed, friendly man than Dr. Robinson ever lived, but his nature, his experience, his outlook and the circumstances were not such as to engender a feeling of cordial support among a public which already looked upon his institution as somewhat of an interloper.

To be sure he was under a handicap from the beginning. An outsider dropped into a foreign environment with a different background, coming from an institution which even in those days was apt to be mentioned with a mocking, not to say sneering overture, was in a difficult position. Added to this was the importation of a whole group

of outlanders occupying positions of importance which had formerly been held by local people. The aloofness with which the newcomers were received was naturally reflected in a strong tendency toward, in fact, an actual establishment of a group relating largely to themselves in a general, social, and professional sense, with limited contact with the community in general.

This was not altogether surprising nor the sole fault of the newcomers. Criticism for "pushing" on the one hand and blame for standoffsinesses on the other makes it difficult to advance into the good graces of a community.

A particular failure on the professional side was in relation to the local medical society. Although membership on the part of the new clinical faculty was secured (of necessity), attendance at meetings was very limited and, although there was some participation in the professional programs, there was on the one hand no particular effort to volunteer contributions and on the other no great interest or effort to secure the advantages which a highly competent and learned member of the faculty could contribute. A particular deficiency was the failure of the newer members of the profession to take a part in the activities of the society in the matter of offices and non-scientific activities. The, in those days, sometimes boisterous meetings, state as well as local, missed a degree of participation on the part of the new faculty which would have been helpful.

Dr. Robinson, in his autobiography, describes the situation in which he found himself the day after he was introduced to the entire faculty, when he found himself on the train filled with local faculty members going to an AMA meeting in New Orleans. He was pressed to partake of liquid hospitality and to sit in a game of poker. He acquiesced in the latter with great misgivings, won, and established a record as a talented player. He never played with them again. What might have been the story had he maintained such a relationship even at some personal discomfort.

Despite these deficiencies, many if not most of the local members of the faculty before the reorganization accepted appoint-

ments and made significant contributions to teaching and the care of patients, particularly in the outpatient department, rendering unselfish, loyal service to the School. This was particularly true of the recent graduates of the period before the reorganization, young men who were holding or just leaving internships and residencies and to an increasing degree of the graduates of the reorganized school as they settled in the community. Indeed, in my opinion, in the years from 1927 to World War II, the Vanderbilt Medical School possessed the best volunteer faculty of any medical school in the country.

To return to the failure to obtain greater community support and the effect of this on the financial problems which began in the late thirties and continued to the recent past.

As Mims has written, it is doubtful if any other institution in the country was so lacking in local support and appreciation. However, Mr. Mims was referring, I think as far as finances go, to grants and gifts in the nature of endowment. An even more serious failure was in support of the Hospital and Outpatient with what would now be termed third party payments. Failure of the community, not only City and County but the State to pay for the care of the indigent rendered by Vanderbilt was a serious defect. To what extent it can be attributed to the general reason for lack of support referred to above can only be surmised.

To a considerable extent the problems of the Hospital, which in turn always became the problems of the School, problems of teaching and research, were the result of its administrative organization. A university hospital has problems which are present to a much less extent, if at all, in the usual nonteaching voluntary type of hospital. Because it follows the organizational pattern of a medical school, at least Vanderbilt's did, the chiefs of the respective clinical services are the heads of their respective departments in the school and as such are independent administrators with a natural channel of authority to the Dean, who is in effect the top administrative officer, drawing to a large extent his authority from the faculty which is both clinical and noncli-

cal. Clearly, this bypasses a somewhat more logical, from the point of the hospital and its services, the Director of the Hospital, or a Chief of Staff. In some circumstances, when the Dean is a clinician and actively concerned with the operation of the hospital, or where the Director of the Hospital is an M.D. and is given sufficient authority, such a plan is workable, leaving aside such factors as personalities. The situation is, however, exceedingly complex and whole books have been written attempting to describe and explain it as well as offer suggestions for its management. It is enough to say that Vanderbilt University Hospital had a lay director from its beginning in 1925 until 1948. The only professional representation in the administration at that level was provided by a nurse, Miss Mathieu, who had come with Dr. Brooks at the opening of the Hospital. I have the highest admiration for Gussie Mathieu and the splendid job she did under most difficult circumstances. I also am acutely aware of the many problems which face an administration bedeviled from all sides.

In addition, the problems are exaggerated in times of financial stress. Furthermore, the situation was made more difficult by the personalities of some of the subordinate administrative personnel who also were outsiders. Again let me say that I was and am sincerely appreciative of the problems these persons faced, and of their devoted and unselfish service. I am only attempting to describe the situation of the school and the hospital during that period.

To sum up, after the first 15 years of the Vanderbilt University School of Medicine; following its reorganization in 1925, despite some problems and threats of greater ones in the future, it had attained a status as one of the best, if not the best, in the South and certainly one of the half dozen best in the country.

#### The Years 1940 to 1950

The period from 1940 to 1950 constitutes for me the second period of the past. It was, of course, a very abnormal time. What it would have been except for the war is completely conjectural, so much so that it can be passed over hurriedly. The effects of the war itself were similar to those for most

medical schools and the period is of interest only in the sense of local happenings and history. Nothing of broad basic nature from the point of view of organization, policy, procedure or similar matters distinguishes it particularly from many other schools. My own relations with Vanderbilt during this period were varied. From 1940 to 1941 I was in Europe. The next three years were a dizzy round of administration as acting head of the Department of Medicine, of crowded teaching, of hectic research, of services as a consultant with the OSRD, to be followed in 1944 by my resignation to accept a commission in the Army. My return to Vanderbilt was in the Spring of 1946, and was brief. I was reinstated as Professor of Medicine, and assigned to the Outpatient Department and as coordinator of the V.A. Hospital affiliation. In the Fall, I again resigned to become Dean of the University of Illinois, College of Medicine where I remained until the Spring of 1950.

The period between 1946 and 1950 was a very difficult one. The dislocations caused by the war, the problems of returning staff, of young physicians graduated from accelerated programs, the development of a new type of Veterans Hospital affiliated with medical schools, were acute. The increasing involvement of the federal government into medical research, its intrusion into welfare and medical care presented new problems. Rising costs, new and greater demands for teaching, particularly at post-doctoral levels (intern and residency) laid greater burdens on the teaching staff. In the absence of depreciation reserves, a common failure of nonprofit institutions such as a medical school, the physical facilities deteriorated greatly. There was also an inability to provide new and newly developed, often very expensive equipment needed for modern research and teaching and space for expanded programs. Shortage of personnel, increased salary demands led to inability to fill vacant and new positions. Due to dislocations caused by the war, weakening of facilities and financial resources and from other causes there was a large turnover in the faculty. A loss of 30 of professional rank, many of them seniors and also

very promising newer men, was only partially matched by additions or promotions.

In the Hospital the already existing problems increased and new ones appeared. Problems of occupancy, of priority of admissions, of inadequate facilities and service caused great difficulties, accentuating the delicate situation of public relations, professional and lay.

#### The Last Years of "the Past"

In the Spring of 1950, I returned as Dean and the period from then until the Fall of 1958 constitutes for me today the last period of the past. The serious problems of the previous 5 years were still present. In addition to the Hospital, the School now was in difficulty. So great was the shortage of clinical material that thought was given to transferring one or more clinical departments to another city. So great was the financial stringency that thought was given to halting the operation of the School, at least the clinical years, for two or three years to accumulate a reserve from endowment income. Fortunately neither of these were required. Improvement came, but slowly. The appointment of 10 new heads of departments and a large number of young assistant and associate professors as well as instructors and research associates brought fresh view points, stimulating ideas, new interest, new programs, vigorous activity. It is interesting to note that this resembled in some respects the period of the reorganization of 1925. It should be recognized that this is one factor closely connected with the cyclical nature of a medical school's fortunes. Characteristically a revival is associated with the appointment of a number of new top faculty. They bring with them energy, enthusiasm and new ideas which are translated into action. In a period of about 25 years the times of retirement begin, death takes its toll, faculty are lost to other institutions and momentum falters. It is not that the faculty has become incompetent. Their value presumably may be at the highest level. But the wave has subsided, it laps the shore gently and it is time for another stone to be dropped. There are other factors to be considered such as the replace-

ment of obsolescent plant and equipment, new relations to be established, and new resources to be tapped. At Vanderbilt the appointment of a new committee of the Board of Trust, the Hospital Committee, brought a better understanding of the problems of the medical school to the Board. The increasing interest of the Chairman of the Board, Mr. Vanderbilt, was very helpful. It was, however, a period of improvisation, of expediency. The original concept of a full-time salaried faculty in the clinical years had completely disappeared. Even the preclinical years became involved in subsides, in grants of many kinds, in "soft money" without any well defined uniform pattern. Inevitably, on the clinical side this involved relations with nonsalaried, volunteer faculty, hospital privileges, admission priority and similar problems.

Despite all these problems many improvements were made. The curriculum was revised and changes consistent with changing times were introduced. Programs in social medicine, in rehabilitation, in preventive medicine, in speech and hearing and other fields were initiated. A modest rehabilitation of the plant and the building of additional space such as the Learned Laboratory was begun. Salaries were raised, staff was added and retirement plans were started. Despite misgivings, which still are justified, federal research grants, training grants and similar support were increased. The School was largely instrumental in securing the passage of legislation which enabled the State to assist and participate with the counties in paying for the cost of indigent cases. Dr. Berson, assistant dean, on loan worked with the State Medical Association and representatives of the State in developing such legislation.

I have devoted so much time to a detailed consideration of the past because of its importance to the present and the future. Let us sum up. A nearly reorganized school, launched on a flood tide of enthusiasm and endeavor, amply supported, with new plant and equipment, with a new core of quality faculty, existing and sound advanced curriculum and program of instruction, with high ideals, becomes in a few years a school of high quality, high standing on a national

and international level, and with a record of high achievement in teaching, in research and in medical care. Then through a combination of circumstances it falls into difficulties and, although retaining a high level of competence, finds it increasingly difficult to maintain that position, struggling against obsolescence of plant, loss of faculty, reduction in research output, becoming a "school in difficulty" rather than a shining example. If this is painful to you be somewhat comforted by the knowledge that this cycle is common to many biologic and human processes, including medical schools. Medical schools have their ups and downs. It almost justifies the facetious remark of Dr. Davison that all medical schools should be burned down every ten years. The answer is that every effort should be made to prolong the high periods and stimulate the prompt and even better climbs to new excellence during the anabolic phase. This is the story of the last phase of the past, the present period and, hopefully, the future.

This completes for my purposes today a review of the past. Its primary accomplishment in my mind was the building of a program and tradition of medical education of the highest quality based on principles of medical care, of teaching, of research, of moral and spiritual values and standards which stand as a foundation on which to continue to build.

### The Present

I am not in any position to discuss in any detail the present. My participation in the affairs of the school is minimal though my interest, my concern and my hopes for it are great. In this sense let us examine the present for the evidence it presents of progress to new levels of excellence. The evidence is impressive. After a rather stumbling start many great improvements and advances have occurred. All can see the expansion in the physical plant, the addition of such splendid facilities as the new library, new laboratories, added hospital beds, and many others.

Nonetheless, one may be pardoned if the situation is examined with reference to the significance of some of those changes in re-

gard to the maintenance of a high level of excellence and as continued growth and betterment in the primary objective and purpose of the school, namely, medical education. Remember that in the process of growth, of expansion, of improvement there may lie the causes of later trouble. If such possibilities are pointed out remember that it is done with the best of intentions in order that mistakes may be avoided and the maintenance of quality, the prevention of decline and continued advance referred to previously is secured.

According to the "Tennessean" of May 30th, the faculty has expanded from 355 to 555, of whom 271 are full-time, since 1958. It is difficult to attribute such an increase to a need for more undergraduate teaching since the number of students remains the same, approximately 200. Undoubtedly new subjects, new programs required additional teachers, though it might be thought that a faculty progressing with the advance of medical science would include some of these in their competency as they discard old, outmoded subjects. Part is probably due to increased specialization as the various major disciplines become more and more fragmented. This, however, is not very consistent with the announced purpose to give a thorough background after which is to come specialization. It does appear to be in accord with the greatly increased number of elective courses which in itself also has some connotations of over-teaching on the one hand and weakening of the basic core curriculum of the four undergraduate years on the other. It is a likely deduction therefore, that the increase is related to graduate teaching including both that leading to higher degrees and that directed to internes and residents. Apparently it does not concern so-called postgraduate teaching to any extent since there does not appear to be any large program of this kind or any particular increase over previous years.

Research is undoubtedly involved in this expansion of the faculty both for itself and in relation to teaching, particularly at the graduate level. One cannot question the value of research but one can question the volume of research. It is the opinion of

many medical educators that medical schools should not be research institutes, that there is an amount of research beyond which it may have an adverse effect on the primary purpose of a medical school. Perhaps this does not apply equally to a "medical center" which is usually engaged in teaching of many students other than medical students.

Although increase in numbers can and should increase the total research output it does not necessarily relate to the productivity per person. It is interesting to look at past experience, particularly to see whether increased funds, increased time and increased facilities have resulted in any higher output per individual.

According to the latest and best figures available to me I find the following. In 1964, the Department of Medicine with 50 full-time faculty published 68 articles. In 1949, with 7 full-time faculty it published 25 articles and in 1935, with 6 full-time faculty it published 26 articles. In 1961, Surgery with 17 full-time faculty published 59 articles. In 1935, with 7 full-time faculty it published 18 articles. In 1961, Anatomy with 9 full-time faculty published 4 papers. In 1935, with 9 full-time faculty it published 24 papers. In 1961, Pharmacology with 18 full-time faculty published 7 papers. In 1935, with 8 full-time faculty it published 24.

I am aware of the dangers and defects of such statistics. Nevertheless I think it emphasizes the importance of the imagination, the intellect, the competence, the interest, the energy of the individual which must always be the backbone of the strong school.

There is the third element in the function of a medical school such as Vanderbilt, namely the care of patients. However, with the diminishing number of nonprivate patients in both wards and outpatient this would seem not a large factor. Undoubtedly the use of patients in clinical research requires more manpower.

There are, of course, many more aspects of today's Vanderbilt than simply teaching, research and the care of patients. There are such things as an expanded plant, faculty and budget. There is the support of these functions and in the light of present cir-

cumstances and third party funds, primarily governmental, the item of overhead comes into view. I am sure that all of you are familiar with the problems which are presented when a large percentage of support for operations is provided from sources which are to some extent at least uncertain. It is true that third party support can be highly desirable and valuable, particularly when given on the basis of payment for services rendered based on fair and equitable agreements. On the other hand, money given just to support what one wants to do may be unreliable and insecure. There are other problems connected with the operation of a large program of teaching and research supported by so-called "soft money" which are well known and which I shall not go into.

A final aspect of expansion is that of affiliation with other organizations, institutions and agencies. Just as a medical school and medical center has an obligation and responsibility for teaching other than medical students, for offering certain services over and above those directly related to its primary function, so does it have a responsibility for participation of joint endeavors within the community be it local, state or national, or even international. There is always the danger, however, that such participation lead to involvement beyond the sound limits of its resources to the detriment of its primary purpose. Such is to be avoided and avoidance can be helped by keeping in a position of control, at least of the extent of the involvement. Portents of other possible weaknesses may be discerned. The great emphasis on the physical sciences here as well as elsewhere carries with it the threat of neglect of the social sciences at a time when increasing emphasis is being placed on these in society generally and from which medicine should not separate itself. Limited observation suggests that these social aspects of teaching, research and patient care are less evident than previously though it is encouraging to note a Division of Human Behavior.

One other important aspect of the present remains to be considered briefly. I refer to community relations and community support. As I indicated earlier this has several

facets. It involves relations with the local medical profession and other health personnel. It includes financial support of at least two kinds, one, the voluntary contribution on the part of individuals and organizations either in the form of capital gifts or recurring contributions. The second is payment for services rendered by public or private agencies. Finally, it includes the public generally as citizens and the other support, particularly that of local government is greatly dependent on their attitudes and feeling.

With regard to the profession it would appear that the great increase in full-time staff would lessen the need for help from the volunteer faculty in teaching. In patient care, however, the great dependence on private patients for hospital income and teaching material makes their wholehearted support very important. Fortunately, some of the problems here would seem to be eased by the increase in hospital facilities in Nashville. I do not know the extent to which local private gifts add to the support of the School or Hospital at present. However, the lack of payment for services rendered apparently remains a large figure according to Dr. Cannon's report in the recent special section of the "Tennessean." In view of the tremendous sums being provided from taxes for many kinds of social and medical relief it seems strange that losses incurred in the care of Davidson County's indigent, that of other counties, in crippled children and rehabilitation, vaunted Federal and State Programs, should exist.

#### The Future

What of the future? Let us assume that, as I believe, the Vanderbilt of the present is in a position of commanding leadership and excellence comparable to that of the period of the late twenties and thirties. What are the prospects? First of all let us note that as time changes—as society, customs and laws change, she must change with them. However, though society changes principles do not, and it is Vanderbilt's obligation and duty as well as opportunity to grow and develop in that new society within those principles. Second, let

us remember what I have pointed out earlier, the cyclical nature of institutions. It is unlikely that entirely the same set of circumstances will or may operate but they will be similar basically and might even include another war. It is the duty of those in charge, and that in a sense means all of us, to learn from the past and avoid those errors and missteps which lead to trouble. If any exist now they should be corrected. As circumstances change—shift emphasis, avoid the merely fashionable, do not mistake popularity for sound informed judgment, avoid expediency for its own sake as far as possible, exploit sound opportunities

but avoid being exploited. Above all, remember that a medical school is made to teach medicine, that research is an inseparable part of teaching and without it teaching is sterile but it must not dominate, and that the care of patients, of people, is the ultimate reflection of the excellence of teaching and research, involving not only the physical aspects of that care but the spiritual, moral and human qualities of the patient as a person. I believe that if these principles are followed Vanderbilt will continue to be the same outstanding school of medicine of first rank it has been for the past 90 years.

# Flagyl destroys trichomonads



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**No topical treatment can**

Flagyl eliminates the difficulties and frustrations that have long attended the treatment of trichomonal infection.

These difficulties arose mainly from:

- 1) *the failure of any previously known agent to destroy the protozoan in para-vaginal crypts and glands;*
- 2) *the failure of any previously known agent to prevent reinfection by eradicating the disease in male consorts.*

The introduction of Flagyl removed both of these long-standing deficiencies. Hundreds of published investigations in thousands of patients have confirmed the ability of Flagyl to cure trichomoniasis.

Correctly used, with due attention to repeat courses of treatment for resistant, deep-seated invasion and to the presumption of reinfection from male consorts, Flagyl has repeatedly produced a cure rate of up to 100 per cent in large series of patients.

Nothing cures trichomoniasis like Flagyl.

### Dosage and Administration

In *women*: one 250-mg. oral tablet t.i.d. for ten days. A vaginal insert of 500 mg. is available for local therapy when desired. When the inserts are used one vaginal insert should be placed high in the vaginal vault each day for ten days, and concurrently two oral tablets should be taken daily.

In *men*: in whom trichomonads have been demonstrated, one 250-mg. oral tablet b.i.d. for ten days.

### Contraindications

Pregnancy; disease of the central nervous system; evidence or history of blood dyscrasias.

### Precautions and Side Effects

Complete blood cell counts should be made before and after therapy, especially if a second course is necessary.

Infrequent and minor side effects include: nausea, unpleasant taste, furry tongue, headache, darkened urine, diarrhea, dizziness, dryness of mouth or vagina, skin rash, dysuria, depression, insomnia, edema. Elimination of trichomonads may aggravate moniliasis.

### Dosage Forms

Oral—250-mg. tablets/Vaginal—500-mg. inserts

**SEARLE**

*Research in the Service of Medicine*

# Mid-South Post Graduate Medical Assembly

## Seventy-Seventh Annual Meeting

Feb. 9-10-11, 1966—Hotel Peabody—Memphis, Tenn.

### GUEST SPEAKERS

#### General Surgery

Marshall K. Bartlett, M.D.—Boston, Mass.  
Clinical Professor of Surgery, Harvard Medical School

R. Kennedy Gilchrist, M.D.—Chicago, Ill.  
Clinical Professor of Surgery, University of Illinois College of Medicine

#### Internal Medicine

Malcolm L. Peterson, M.D.—St. Louis, Mo.  
Assistant Professor of Medicine, Washington University School of Medicine

Dudley P. Jackson, M.D.—Baltimore, Md.  
Associate Professor of Medicine, Johns Hopkins Hospital

Arthur Strauss, M.D.—Bethesda, Md.  
Head, Autoimmunity Section Laboratory of Immunology, National Institute of Allergy and Infectious Diseases

#### Obstetrics and Gynecology

John D. Thompson, M.D.—Atlanta, Ga.  
Professor and Chairman, Dept. of Gynecology & Obstetrics, Emory University

Langdon Parsons, M.D.—Boston, Mass.  
Clinical Professor of Gynecology, Harvard Medical School

#### Neurosurgery

Irving S. Cooper, M.D.—New York, N. Y.  
Director of Department of Neurologic Surgery, St. Barnabas Hospital

#### Urology

Robert J. Prentiss, M.D.—San Diego, Calif.  
Associate Clinical Professor of Surgery-Urology, University of California School of Medicine

### Pediatrics

Richard L. Day, M.D.—New York, N. Y.  
Director of the Medical Department of Planned Parenthood—World Population

Harry Medovy, M.D.—Winnipeg, Canada  
Professor and Head of Department of Pediatrics, University of Manitoba

### Radiology

Harold O. Peterson, M.D.—Minneapolis, Minn.  
Professor and Head, Department of Radiology, University of Minnesota

### Thoracic Surgery

William E. Adams, M.D.—Chicago, Ill.  
Professor of Surgery, University of Chicago

### Orthopaedic Surgery

Sam Banks, M.D.—Chicago, Ill.  
Associate Professor, Orthopaedic Surgery, Northwestern University Medical School

### Special Projects "Aqualab"

Capt. George F. Bond, Washington, D. C.  
Medical Corps, U. S. Navy  
Special Projects Office

### Special Projects "Gemini"

Col. Earl W. Brannon  
Keesler Air Force Base, Mississippi

*The Mid-South Postgraduate Medical Assembly in Cooperation with the University of Tennessee Department of Continuing Medical Education Will Be Acceptable for Credit*

on the  
executive  
director



## News of Interest to Doctors in Tennessee

### SUMMARY OF ACTIONS OF THE AMA HOUSE OF DELEGATES November 28-December 1, 1965—Philadelphia

#### Usual and Customary Fees

● The House reaffirmed its support of the "usual and customary" fee concept as the basis for reimbursing physician participants at all levels in government programs. It also urged "the individual physician's usual and customary fee concept to all third parties." Eight statements of policy regarding the fees charged by physicians for medical services were adopted. The House in acting on the report of the new "prevailing fees" program of the National Association of Blue Shield Plans, recommended: "that the concept of the prevailing fees program of the NABSP be noted as one of the methods of compensation in those regions where the prevailing fees program is approved by the local or state medical society."

#### Abortion and Sterilization

● The House received a report containing recommendations of the Committee on Human Reproduction. The report was referred to the Board of Trustees for further study. It was stated that other interested groups such as lawyers, clergy, sociologists, legislators, and government administrators would be helpful to AMA in conferring on this matter. The House endorsed a statement that "appropriate legislation be enacted, wherever necessary, so that all physicians may legally give contraceptive information to their patients, consistent with the policy statement of December, 1964, and with the judgment and conscience of each individual physician."

#### Size of the House Of Delegates

● The House approved a recommendation that the growth of the AMA House be slowed down after it reaches 250 members. When it reaches that size, the apportionment ratio will be automatically raised from one delegate per 1,000 members, or fraction thereof, to one delegate per 1,250 members, or fraction thereof, in electing further delegates to represent each state association. The House approved some of the many recommendations of the Committee to Review the Organization of the House of Delegates, but it did not approve a number of others.

#### Federal Health Care Laws

● The House took a number of actions with regard to federal health care laws passed in 1965, such as P.L. 89-97 (Medicare) and P.L. 89-239 (the Heart Disease, Cancer and Stroke Amendments). These actions included:  
—That AMA immediately seek remedial action to delete the requirement in Public Law 89-97 that a patient be hospitalized to establish eligibility for nursing home care . . .  
That the AMA immediately seek remedial action to amend Public Law 89-97, Part B, Title XVIII, by deleting the word "receipted" from Section 1842, and substituting "such payment will be made on the basis of a method of payment so arranged to preserve and continue the professions current practice of billing" . . . That the AMA recommend that the Department of Health, Education and Welfare establish that an agreement for payment between the patient and physician consti-

tutes valid evidence of services rendered . . . Authorized a study of the constitutionality of P.L. 89-97 by calling on the Board to take such action as may be necessary and appropriate to provide for the study and investigation of all aspects of the law for the purpose of determining possible court action to test the legality and constitutionality of any provision or regulation issued under the law and authorized the Board to initiate such legal proceedings as it may deem advisable to implement the purpose and intent in this regard . . . Endorsed a recommendation that State and County Medical Societies be urged at this time to assume leadership in the establishment of local advisory committees under the Heart Disease, Cancer and Stroke Amendments of 1965 . . . Declared that the AMA Advisory Committee to HEW persist in its effort to achieve "practical recognition" by HEW of the differences between utilization review and claims review committees. The House adopted a report of the Council on Medical Services which said that widespread confusion exists between the utilization review function and the claims review function. It also adopted a series of recommendations in the report aimed at clearing the confusion.

#### **TMA's Resolution Acted Upon Favorably**

- The House approved TMA's resolution calling for continued efforts through "all appropriate channels" to achieve the separation of billing and payments for professional fees from hospital charges under insurance contracts written by the health insurance industry. The resolution called for the House to urge the American Hospital Association to "assist the hospitals of the U.S. to establish a system of uniform cost accounting and billing." The resolution also pointed out that in the administration of Public Law 89-97, which places hospital-based specialists under Part B of the Law, it will be necessary to change many insurance contracts now in existence.

These changes will have to be made to conform with the changing conditions - namely, the separation and identification of hospital-based specialists as specialists not under hospital control.

#### **Other Important Actions**

- Referred to the Board of Trustees a resolution asking AMA to develop a multi-copy billing form for physicians to use in billing their patients for services rendered and that the patient use this bill in recovering financial assistance "from any source" . . . Instructed the Council on Medical Services and its Committee on Welfare Services to develop for the AMA its definition and principles for the determination of medical indigency . . . Urged organized medicine at all levels to play an active role in the stimulation and development of voluntary community health facility and services planning and urged state and local societies to initiate and help formulate community health facility and service studies for their local areas . . . The House accepted for information an opinion adopted jointly by the Council on Medical Service and the Judicial Council stating that "when a physician assumes responsibility for the services rendered to a patient by a resident or intern, the physician may ethically bill the patient for services which were performed under the physician's personal observation, direction and supervision" . . . Adopted a resolution that any future announcements, meetings or discussions regarding utilization committees be carried out "on the firm basis of 'shall be composed of practicing physicians'" . . . Reiterated a previous policy statement urging the creation of a separate post in the Cabinet of the President of the United States for a Secretary of Health who "shall have complete responsibility for all health activities of the government" and "who shall be a properly qualified doctor of medicine". The House directed the Board of Trustees to provide for immediate public response to statements which

(Continued on page 74)

# Public Service

THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

## 1965 In Review

- Scientists who try to understand life by studying its lowest common denominators made some important advances in 1965.

No one can yet answer the question: What is life? But during the past year, for the first time, scientists put together a synthetically-produced model of a nucleic acid—one of the lowest common denominators—and saw it reproduce itself in the test tube.

Other major news stories in biology and medicine in 1965 included:

—The first determination of the complete chemical structure of a nucleic acid.

—Cultivation of the leprosy bacillus in tissue culture for the first time, an advance that can mean much for investigators trying to develop medicines to prevent or combat the disease.

—A cancer-causing agent that may be a virus appeared to have been implicated in the production of human leukemia.

—A unique research facility, the Institute for Biomedical Research of the American Medical Association Education and Research Foundation, officially opened its doors. Dedicated to basic scientific investigation, its members look for new questions rather than answers to problems already defined.

—The AMA opened a campaign against venereal disease, the nation's most urgent communicable disease problem.

—Two controversial pieces of legislation—medicare and the regional medical center bill—were signed into law.

- The American Medical Association has scheduled three interesting and informative conferences to be conducted in Chicago during January and February.

The AMA Council on Legislative Activities and the Council on Medical Service will sponsor a two-day meeting at the Drake Hotel, January 20-21, on Federal Medical Assistance Programs. The conference will be concerned primarily with the new Title XIX federal-state medical assistance program, with federal-state programs for children administered by the Children's Bureau, and with the aspects of "war on poverty" programs administered by the Office of Economic Opportunity.

The 62nd annual Congress on Medical Education will be conducted at the Palmer House on February 3-8. The meeting is co-sponsored by the AMA Council on Medical Education, the Advisory Board for Medical Specialties and the Federation of the State Medical Boards of the United States. Population growth and change—problems for medical education, measurement of medical competence and the demands for medical manpower are a few of the many topics to be discussed.

The Continental Plaza Hotel will be the site of the second National Voluntary Health Conference February 16-17. The purpose of the meeting will be to examine the changing relationships in voluntarism and the influence of present and future voluntary and public forces on the kinds and directions of these changes. Emphasis will be on communica-

## Important National Conferences Set

## **Health Information Popular Subject**

tions and public attitudes, legal patterns and accreditation practices.

Further information on any of the conferences may be obtained by writing the AMA, 535 N. Dearborn St., Chicago.

- More than 31 million pieces of literature, mostly related to health information and education, were distributed by the AMA in 1965. This is more than twice the amount distributed in 1964.

Steadily increasing requests indicate that AMA literature plays a significant role in schools, conferences, health improvement efforts, career days and for individual information.

Some of the more popular items distributed included: an emergency medical identification card, a family health record, and the pamphlets "Until Your Physician Comes," "Smoking: Facts You Should Know," and "First aid Manual."

Approximately 50,000 orders for a sex education pamphlet arrived after it was mentioned by a nationally syndicated columnist.

More than 80 pamphlets and two sets of 12 full-color posters are available from AMA for distribution by individual physicians. For a complete list of AMA health information materials, write to the TMA Public Service Office.

If you make it available, your patients will read it.

## **News Media Aids In Promoting Annual Community Health Week**

- Newspapers, radio and television stations across the state responded in large numbers to requests from county medical societies for public service space and air time to call attention to Community Health Week, November 7-13.

The primary objective of this annual nationwide observance was to stimulate greater public awareness and appreciation of the wealth of health facilities and services which are available locally and to stress the health progress and medical advances which have been made locally through the concerted efforts of all members of the community health team.

Several newspapers ran a series of articles which were aimed at prompting greater understanding of specific health problems or needs while radio and television stations responded with spot announcements during the week-long observance.

- Applications for benefits under the Medical Aid for the Aged program are being approved at the rate of nearly 1,200 per month, statistics released by the Tennessee Department of Public Welfare show.

By the end of October 32,792 persons were certified as being eligible for benefits. In addition, 45,082 persons receiving Old Age Assistance were eligible for medical benefits under that program.

A total of 11,585 different patients, or approximately one-third of those certified, received benefits under MAA during the month of October. 16,134 days of hospitalization were provided, 24,573 drug prescriptions were filled and 657 patients received nursing home care. Total cost of benefits for the month was \$556,520.65.

An additional \$738,119.73 was expended to provide 14,645 days of hospitalization, 25,897 drug prescriptions and 2,212 patients with nursing home care under the Old Age Assistance program.

Just under \$1.3 million was spent for medical care during the month for recipients of both programs.

- The bi-annual TMA State and County Officers Conference will be held February 27 in Nashville at the Hermitage Hotel.

Attendance is not restricted but is open to all interested physicians. Have you mailed your advance registration form to TMA headquarters?

## **MAA Program Continues to Grow**

## **State and County Officers Conference February 27, 1966**

The authors emphasize that hysterical reactions might be mistaken, under certain circumstances, for the untoward effects of special drugs.

# Extrapyramidal Reactions, Tranquillizers, and Diagnostic Difficulties

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Abnormal neuromuscular activity has been reported with the use of certain tranquilizing drugs. This has been variously labeled as an extrapyramidal reaction or the "extrapyramidal syndrome." Facial, jaw, and tongue spasms have been reported, as well as trismus, spasms of the neck muscles, extensor rigidity of the back muscles, and carpopedal spasm. The usual drug noted to cause these side effects is prochlorperazine (Compazine). The manufacturer estimates the frequency of this side effect to be about 0.1% in adults receiving up to 40 mg. daily. Such reactions have been documented in the French and German literature, but they usually occurred with larger doses of prochlorperazine.<sup>1,2</sup> O'Hara,<sup>3</sup> in 1958, described extrapyramidal reactions in patients receiving prochlorperazine. Christian and Paulson<sup>4</sup> also reported severe disturbance in motility after small doses of prochlorperazine. Waugh and Metts<sup>5</sup> in 1960 described a severe extrapyramidal motor reaction induced by this substance. Their patient had laryngospasm with acute respiratory distress. However, the similarity and type of patient treated with the drug is impressive. All patients tend to be hyperreactive to pain and have multiple complaints. Except for the patient reported by Waugh and Metts, there was little organic basis for their symptoms. The difficulty in assessing such a patient is illustrated by the following 2 case reports.

**Case 1.** W. C., a 15 year old white male student had been well until he developed malaise, sore throat, and generalized abdominal discomfort. He had been examined by his family physician and found to have a mild pharyngitis with slight enlargement of the cervical lymph nodes.

Procaine penicillin and Novahistine (phenylephrine HC1 and chlorpheniramine maleate) had

been prescribed. Forty-eight hours later he complained of difficulty in swallowing and in talking. Progressive shortness of breath developed, and he was brought to the emergency room at St. Thomas Hospital.

Physical examination revealed him to be in moderate respiratory distress, with a facial flush. There was difficulty in talking, and his voice was weak. The mouth was open and he complained of tightness in the throat. Difficulty in swallowing was noted. The jaw was fixed in an open position and the tongue protruded. He could not control the motion of the tongue. There was pain bilaterally referred to the temporomandibular joint, but with manipulation the patient was able to move the jaw. In rapid succession, he developed opisthotonus and spasmodic movements of the head and neck with movement of the head from side to side. Respirations became more difficult. The facial flushing increased. Tonic spasms of all extremities then developed. Intermittent spasmodic contractions of the playtsma and muscles of mastication then appeared.

Efforts to reassure the patient were unsuccessful. A placebo was tried but there was no improvement. Chlorpromazine was finally administered in dosage of 50 mg. intramuscularly. Within a matter of 10 to 15 minutes, the patient was able to speak clearly, close his mouth, and the spasmodic muscular contractions ceased. He returned home and was later followed as an outpatient. There was no recurrence of symptoms.

**Case 2.** M. B., an 18 year old girl was admitted on Oct. 28, 1959, because of spasmodic jerking of the head and jaw, uncontrolled by phenobarbital. She had been a compulsive eater in the past. "Every time I got mad I would eat." She had always been prone to tears. One and a half years previously she suddenly stopped eating and suffered a period of unprovoked crying. She had been tremendously overweight in the past, and was currently on a weight reduction diet. Two weeks prior to admission her mother had an operation and the patient had been taking care of her younger siblings. One month before admission she had entered a course for x-ray technicians. In addition to her work at the technology school, she had had to run the household for 2 weeks. On the day before admission she was assigned to a new job in the radiology department. When a corrective comment had been made by

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the physician in charge, she immediately became upset and began to cry. On the day of admission spasmodyic jerking of the neck took place. Large doses of phenobarbital had not controlled the movements.

Examination revealed an obese white woman with a B. P. of 110/70 and P. rate of 100. Spasmodyic jerking of the neck and head was constantly present, somewhat resembling that of a person who had had a crying bout, i.e., sobbing without tears. There was no nuchal rigidity. The heart and lungs were normal. The deep reflexes were active and equal. Sensation was roughly intact.

Neurologic consultation was obtained and the diagnosis of conversion reaction with hysteria was confirmed. Despite the intravenous administration of sodium amyta (0.5 Gm.), the spasmodyic contractions of the neck, head, and muscles of mastication continued for 3 days before gradually subsiding. Forty-eight hours later, after a visit by her mother, they recurred and lasted 24 hours. With reassurance she gradually improved and was discharged on Nov. 3, 1959.

### Comments

These 2 case reports emphasize the problems that may arise in an adolescent boy or girl with bizarre dyskinesia or other manifestations of abnormal neuromuscular activity. Similar incidents may follow the use of prochlorperazine and are interpreted as an extrapyramidal reaction induced by the drug. Fortunately, this drug and other like tranquilizing preparations had not employed in these patients. Because prochlorperazine is used in many instances of functional vomiting and other functional

disturbances, particularly in a similar type of patient, hysterical reactions can easily be mistaken as a manifestation of drug sensitivity. Transitory extrapyramidal symptoms do occur, usually after a longer period of drug therapy than the 48 to 72 hour duration in the patients herein described. With prochlorperazine extrapyramidal reactions are most often seen in hospitalized mental patients, maintained on high dosages for long periods, although some have been seen in patients getting lower doses. If the possibility of such a reaction exists, continued use of the drug is not warranted. It should be stopped while side effects are present, but may be reinstated later at a lower dosage.

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## CLINICOPATHOLOGIC CONFERENCE

Methodist Hospital,\* Memphis, Tenn.

### Primary Hyperparathyroidism

This 85 year old widow was admitted to the Methodist Hospital on May 10, 1965. Her principal complaints were progressive weakness, shortness of breath, and recently, bone pain. She had previously been admitted in August, 1963 because of chest and epigastric pain, and had been entered before that in July of 1963, after having been seen on an emergency house call following a sudden episode of chest pain and syncope. Following the two admissions in 1963 the patient had had progressive anemia and proteinuria. EKG. changes demonstrated ischemic myocardial findings.

During the past few weeks the bone pain had supervened and had become almost incapacitating.

Physical examination upon this admission revealed a well developed kyphotic alert white woman in moderate respiratory distress, with rather extensive pain on manipulation of the extremities, particularly on the left.

She had complete edentia and mild to moderate lenticular opacities. There was moderate neck vein distention at 30°. Moist basilar rales were heard, especially on the right side. The heart was enlarged to the 6th I.S. at anterior axillary line. Rate and rhythm were regular. There was a grade III precordial systolic murmur, greatest at the apex: A-2 was equal to P-2 and neither was accentuated. Abdominal examination revealed the liver to be slightly beneath the right costal margin; it was firm, smooth, and only slightly tender. The left abdomen was protuberant over the left lateral margin and seemed to be secondary to muscular insufficiency in this area. The kidneys and spleen were not palpable. Pelvic examination revealed several tight vaginal bands. Examination of the extremities revealed a trace to 1+ pretibial edema, and marked bone tenderness of the legs and mild to moderate tenderness over the hands, wrist, and forearms. There was very slight tenderness over the sternum. Inspection of the chest revealed an increased AP diameter with considerable kyphosis.

The laboratory findings included a BUN. of 140 mg., and blood glucose of 131 mg. per 100 ml. (not fasting): there was pyuria of 15 to 20 WBC. per hpF and many bacteria; albuminuria, negative test for Bence-Jones protein. Serum phosphorus was 2+ 7.5 mg., serum calcium of 4.6, serum sodium 137, potassium 4.7, and CO<sub>2</sub> content of 16 mEq/L. A colony count on the urine showed greater than 300,000 organisms per ml. Alkaline phosphatase was 1.7 King-Armstrong units. Total

serum protein was 6.7 Gm. with the albumin 4.6 and globulin 2.1 Gm., and an A/G ratio of 2.2: 1. Urine culture grew out *E. coli* and *Pseudomonas* species. The *Pseudomonas* was resistant to chloramphenical, Furadantin (nitrofurantoin), Keflin (cephalothin), NegGram (nalidixic acid) and Tetracycline.

On the 3rd day after admission the BUN. fell to 98 mg. per 100 ml. Bone marrow revealed only erythroid hyperplasia. X-ray studies were done.

The patient had been maintained previously on anticoagulants warfarin sodium (Coumadin) and her prothrombins on admission were in the neighborhood of 32 seconds.

Electrocardiographic changes included nonspecific STT wave changes compatible with digitalis effect. Possible coronary insufficiency was suggested with probable left ventricular hypertrophy and possible hypokalemia.

While in the hospital the patient described pain in the left neck region and in the chest. Nausea and anorexia were present. She was observed to be less mentally alert on the 3rd hospital day. Late on May 13 Cheyne-Stokes respirations were noted. A Grade III—IV diastolic murmur was detectable at the apex along with a Grade I—II systolic murmur. All peripheral pulses were present. By May 15, she had become comatose.

Rectal T. on the 3rd hospital day was recorded as 100.4. The P. had risen to 125 on the 4th hospital day. Gastric suction was required on the 4th day. No vital signs were observed at 3:00 A.M. on May 16.

Therapy included Dilaudid for bone pain, digitalis grs. 1.5 daily, Coumadin 5 mg. daily, sedation, and Gantrisin for the urinary tract infection.

**DR. KYLE CRESON:** This was an 85 year old widow who was first seen in this hospital in July 1963, admitted because of a sudden syncopal attack at home with chest pain. The referring physician who saw her at the home was considering the possibility of a coronary and admitted her by ambulance. However, apparently the work-up was not suggestive of a coronary, but did show some considerable myocardial ischemia. Two or three SGOT determinations were within normal limits. She returned home and then had progressive episodes of chest pain and abdominal pain, particularly following meals. This was epigastric and to the left upper quadrant. She was readmitted because of this in August 1963. One consultant thought that the epigastric pain was so severe, with considerable radiation through to the back, as to suggest pancreatic tumor. Another felt it probable that all of this was due to coronary artery and oth-

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er artery disease, particularly that of superior mesenteric and of the left splenic artery. She was started on Coumadin (warfarin sodium) and kept on that drug for most of the following 2 years until her death.

She then was only seen occasionally at the office for the next 2 years during which time there was progressive weakness, progressive shortness of breath, and progressive anemia. The BUN approximately a year ago was about 40 mg., and some 6 months before admission it had climbed to 50 mg.% However, the chief complaint which precipitated this admission was severe bone pain. This started approximately a week or two before admission and came to the point where it was incapacitating,—she was unable to walk.

Physical examination on admission revealed a short, kyphotic, elderly woman with moderate weakness and shortness of breath. Vital signs were fairly normal. She had some mild to moderate neck vein distention and some lens opacities. There were bilateral basilar moist rales, more on the right. The heart was enlarged to the left anterior axillary line, 6th interspace. Abdominal examination revealed only the tip of the liver; it was otherwise unremarkable except for some apparent diastasis recti or herniation of the left lateral abdominal wall. Vaginal examination revealed several vaginal bands; rectal examination was unremarkable.

The most interesting findings were considerable tenderness to palpation of the legs, and the moderate tenderness to palpation of the hands, wrists, and forearms; there was very little tenderness of the sternum.

The laboratory findings revealed a considerably elevated BUN. of 140 mg. The phosphorus was elevated to 7.5 mg. and the calcium depressed at 4.6 mEq/L. The albumin, globulin and A/G ratio appeared to be normal. A urine culture revealed *Pseudomonas* as well as *E. coli*, the former being resistant to most of the antibiotics. It was sensitive to kanamycin and the patient was later placed on this drug. The alkaline phosphatase was not elevated. Urine colony count revealed a count greater than  $10^4$ ,

there were 300,000 per cu.mm. The CO<sub>2</sub> was slightly depressed, suggesting a metabolic acidosis, although she was apparently somewhat short of breath and there is some possibility that this could have been a respiratory alkalosis as well.

She had pyuria on urinalysis with an albuminuria but a negative Bence-Jones protein.

The third day after I.V. fluids, the BUN. had fallen to 98 mg.%. A specimen of bone marrow was obtained. This revealed simple erythroid hyperplasia. Myeloma cells were not found.

DR. DAVID CARROLL: The PA chest film shows no enlargement of the heart. This lesion in the right base of the middle lobe appears to be an old fibrotic calcific lesion.

A dense calcification of the aortic arch is obvious. The examinations requested on this patient's admission on May 11, were a barium swallow for esophageal function, a PA and lateral chest, a film of the abdomen and a skeletal survey. The lateral chest film confirms the tremendous calcification of the aorta and here we identify this scar as being a calcified pleural plaque, anteriorly.

Going to the films of the extremities, again we are impressed with the tremendous amount of arteriosclerotic calcification in both forearms and legs. The wrists show evidence of old rheumatoid arthritis, probably "burned out," partially ankylosed. The bone structure is quite interesting in both situations, in that it shows a severe degree of osteoporosis and in places in the forearms, there are little cystic areas.

The film of the abdomen is of particular interest. I think the soft tissue and gas shadows are quite normal but the bone is most remarkable. It presents a very striking stippled calcific appearance. We see the same thing going on in the calvarium; a woody granular appearance of the calvarium, so as to practically lose the definition between inner and outer tables of the skull.

Let us consider the differential diagnosis of this from radiologic evaluation. Plasma cell myeloma has already been mentioned as something to worry about, and although plasma cell myeloma can be associated with a diffuse generalized osteoporosis as its only

finding, this stippled granularity of bone is absolutely not like plasma cell myeloma. We do not see any evidences of a localized plasmacytoma, and the calvarium particularly does not show any evidence of the "punched out" lesions of plasma cell myeloma. It is interesting to speculate on whether or not the changes might be due to an osteoblastic metastatic process. Again, the stippling of calcification is too granular. It simply does not show the coarse areas of over-calcification that an osteoblastic lesion would have to show. Myelofibrosis is an attractive possibility, but it doesn't have the stringy calcific distribution that myelofibrosis should have. Obviously, in an 85 year old person, the natural thing is to attribute all of these changes simply to age. And actually I think the findings in the long bones would probably fit her age without any further explanation. But the changes in the calvarium and the pelvis and spine simply do not fit either osteoporosis or osteomalacia. So we are stuck with one diagnosis and I think, at least in my opinion, these bone changes are pathognomonic of hyperparathyroidism.

Let's look for some of the other findings of hyperparathyroidism and see if we find them. One characteristic finding in hyperparathyroidism is loss of the lamina dura, obviously there is no point in looking for that in a patient who is edentulous. Osteitis fibrosis cystica occurs, and I suppose one might interpret these changes in this right ulna particularly as being compatible with osteitis fibrosis cystica, but they can actually be explained on the basis of age alone. Nowhere do we see the expanding "brown tumors," which are so striking a part of the osteitis fibrosis cystic picture of hyperparathyroidism. We see much calcium in her arteries, but this again can be explained on the basis of age. We do not find evidence of nephrocalcinosis or cartilaginous calcification or other favorite sites for abnormal calcium deposits in hyperparathyroidism, but in the patients in whom the bone findings are the most striking, one usually does not see the soft tissue calcifications of hyperparathyroidism. Another favorite sign of hyperparathyroidism is right beneath the edge of the bone, particularly on

the ends of long bones. This is partial resorption of bone, so-called subperiosteal bone resorption. A favorite place to look for this is in the lateral ends of the clavicles and often times a simple preliminary film of the chest will be diagnostic of the condition. I really can't be sure here. The distal end of the right radius is a little bit more convincing, but still not striking enough. So in summary, as far as the x-ray findings of hyperparathyroidism are concerned, we have to base our diagnosis on the granular, woody, stippling of calcium in the calvarium, spine and pelvis, but I believe this is enough. Hyperparathyroidism, of course, can be either secondary to chronic renal failure or be primary due to an adenoma, and I must admit, I'm sure we all base our opinions on our own experience, I personally have not seen this striking a case in any other than a little child in which it was due to chronic renal failure and therefore I would have bet a good deal on this patient having an adenoma of the parathyroid.

DR. CRESON: The patient was apparently continued on anticoagulants, and prothrombin time was within the therapeutic range. Electrocardiographic changes were nonspecific, suggestive of generalized ischemic pattern. Probable coronary insufficiency was suggested with probable left ventricular hypertrophy, possible hypokalemia.

While in the hospital the patient had some pain in the left neck and chest. Anorexia and nausea were present. She was observed to be less alert mentally on the third hospital day. Late on May 13 Cheyne-Stokes respirations were noted. A grade III-IV diastolic murmur was detectable at the apex along with a grade I-II systolic murmur; this is the first time a diastolic murmur is ever mentioned. The peripheral pulses were present. By May 15, she had become comatose. Rectal temperature on the third hospital day was recorded as 100.4° F. The pulse had climbed to 135 on the fourth hospital day. She had some gastric suction and then she expired.

She received Dilaudid (dihydromorphinone), digitalis, Coumadin, sedatives, Gantrisin (sulfisoxazole), and unmentioned was kanamycin.

In this case we have to consider several possibilities. The first, multiple myeloma, was considered and adequately ruled out. I can't imagine a patient with this extensive bone changes not having plasma cells in the bone marrow. Also, I think the normal globulin tends to rule it out. (A serum electrophoresis pattern was not done. This is the most accurate early diagnostic test of all.) Still, I believe that we have adequately ruled out multiple myeloma. Also, I was impressed that her sternum was less tender than the long bones. The flat bones are the ones that are most often affected in myeloma.

Another consideration is rheumatic heart disease. Everyone says you never see a mitral stenotic live to be 85. I think it is quite rare. If one sees someone with a heart murmur at 85, one can almost throw out the possibility of rheumatic heart. She had just a simple systolic murmur, at least except for this one notation, and I don't believe the clinical picture was suggestive of rheumatic heart disease.

I considered the possibility of a dissecting aneurysm because she did have this diastolic murmur recorded just prior to death. I do not get the feeling that this was a cardiac catastrophe. She may have expired with a dissecting aneurysm, I don't know how I would rule that out.

I thought we would need to consider chronic glomerulonephritis. Since Kark has been doing biopsies on all kidneys with any type of albuminuria, he has found more and more of the so-called orthostatic albuminuria's due to chronic glomerulonephritis. I think in any patient with chronic renal disease we have to consider this and not let pyuria throw one off, because it would appear, that persons with chronic glomerulonephritis have an increased tendency to develop pyuria and chronic pyelonephritis. In fact, Dr. Jackson, in the *New England Journal of Medicine* (May 1965), has again emphasized how difficult it is to establish a diagnosis of chronic glomerulonephritis once the patient is at the end stage. Certainly, hypertension would help, and our patient did not have that. I think we expect more patients with chronic glomerulonephritis to have hypertension than in pyelonephritis. If

one has any history of a nephrotic syndrome, I think we can unequivocally rule out pyelonephritis. At least pyelonephritis, to my knowledge, is not one of the now ten causes of nephrotic syndrome. But she didn't have this, so possibly she had some chronic glomerulonephritis.

Dr. Carroll has admitted that in the end stage one often cannot really tell the difference radiologically, and certainly one can't biochemically, between primary and secondary hyperparathyroidism. As you know when the phosphorus begins to rise in azotemia, there tends to be a product (when we used to do the calciums in mg%) of 40—that was the calcium times the phosphorus; when the phosphorus would go up the calcium would go down. In hyperparathyroidism it is just the opposite. There is a decreased tubular reabsorption of phosphorus and the phosphorus goes down in the plasma, the calcium goes up. But when renal disease from primary hyperparathyroidism begins, one has the same problem. The phosphorus then begins to rise and the calcium begins to fall. I think secondary hyperparathyroidism would be a good thought here.

Kyphoscoliotic heart disease, has to be mentioned. She was tremendously kyphotic. I think we have seen all types of murmurs associated with kyphoscoliotic heart disease. Certainly it has been well described to produce progressive congestive heart failure changes.

Metastatic bone disease must be considered in anyone with bony changes of this nature. Apparently it is believed to be fairly well ruled out. Again, one can get a lot of calcium changes at times with metastatic bone disease, particularly like Paget's disease if patients are put to bed. The alkaline phosphatase shoots right on up, the calcium can go on up, and one gets a lot of problems with calcuria and calcium renal problems.

Finally, there is a primary tumor, usually of the kidneys, bladder, or lung which may cause calcium problems particularly hypercalcemia, but eventually if it goes on long enough, can interfere with kidney function and produce a picture somewhat like this. Obviously, these type of calcium depletion

problems would give osteomalacia and not necessarily the metabolic bone picture, particularly as seen in the skull. I think as clinicians, we try to separate osteomalacia and osteoporosis very carefully, although the radiologists can't do that very well. I think it is important to remember that osteoporosis is a protein problem; osteomalacia is a calcium problem.

Finally, my impressions in this renal condition is chronic pyelonephritis. I think she also had generalized arteriosclerosis, arteriosclerotic heart disease, possible splenic and mesenteric artery stenosis. Apparently she had considerable amelioration of the abdominal pain following anticoagulants two years ago and there was no further history suggestive or physical changes suggestive of a tumor of the pancreas.

Finally, since I think Dr. Carroll feels so strongly about this, but also for other reasons, I would like to suggest that this patient had primary hyperparathyroidism.

DR. ALYS LIPSCOMB: One or two things regarding hyperparathyroidism might be mentioned.

I believe that the consensus, as far as the literature is concerned, is that the single most valuable diagnostic procedure is the serum calcium. And this test, I think, will be the one we will rely on most. I have not been enthusiastic about the various phosphate procedures. Some of them, in fact, are fallaciously based. I think a very significant new advance in diagnosis which is actually in the research stage now, but which probably in the future will be the procedure that will take the place of all our indirect approaches to the diagnosis of parathyroid disease, is that of a radioimmunoassay of parathyroid hormone. This is accomplished by labeling parathyroid hormone with  $I^{131}$  and developing antibodies which are specific for this material and by competitive inhibition determining the amount of excessive parathyroid hormone that is present. This is accomplished by a combination of chromatography and an electrophoretic procedure whereby one can detect excessively high quantities or excessively low quantities of parathormone.

I might also mention something that is relatively new and far from satisfactory yet,

but something that I believe is pointing in the direction of helping us localize parathyroid adenomas. Here, of course, I refer to scanning the upper portion of the body for parathyroid adenomas. This work was first reported in about 1962, in which a group at Michigan first used Cobalt 57 labeled  $B^{12}$ . With this material they were able to accomplish in animals labeling of a parathyroid gland and then demonstrating its location by photoscanning. This, unfortunately, has not been satisfactory in the human patient. The low specific activity of the material is such that these scans are not valuable. In the last couple of years, other materials have been advocated in using this type of procedure. One is the use of tritiated methionine as a labeling agent for parathyroid structures. This likewise is not good enough. The third, and the last compound which has been used with a fair degree of success is that of selenium labeled methionine. This, of course, is the material used for pancreatic scanning and it is a material which is incorporated into protein of the hormone as it is manufactured. And, provided one can blank out the thyroid by giving triiodothyronine, one can then demonstrate, by scanning, some of these tumors if they are of a large enough size. The Michigan group, in a recent discussion in the *Journal of Nuclear Medicine*, demonstrated 2 out of 3 parathyroid adenomas by this technic. The third one weighed only about 1 Gm. and was not shown. The difficulty in using this procedure is the high concentration in the bone marrow of the cervical area and the possible blanking out from the thyroid provided it is not adequately blocked. Both of these procedures, I think, are things we need to think about as we look toward the future and the future diagnosis and location of parathyroid adenomas. Much, of course, in the way of surgical time could be reduced if one knew where the adenoma was before operation.

The emergency treatment of hyperparathyroidism is important and to which we do not have the answer as yet. However, rather recently from Boston, Drs. Lemmon and Donatelli have published some suggestions which might be valuable to us. One is the use of sodium sulfate. Sodium sulfate

has been found to decrease remarkably the concentration of serum calcium. In parathyroid crisis this is often just as much an emergency as is diabetic coma or an Addison's crisis.

The chelating agent, ethylenediamine tetracetic acid, has been suggested in the past but largely has been abandoned because of its nephrotoxic properties. In this emergency there is often renal damage as a result of the action of the hormone and thus this treatment is undesirable.

The various dialyzing procedures, the hemodialysis and peritoneal dialysis are not good technics to use here.

Another material which may be helpful and which has been used in 2 cases to lower serum calcium temporarily, is of sodium phosphate. Sodium phosphate in large doses, 10 to 15 Gm. per day, does lower serum calcium. In one instance this was given orally and produced the desired result; in another case it was given intravenously, and by this route the adequacy of its effect was shown by the fact that the patient developed tetanus.

DR. JOHN DUCKWORTH: After these remarks there is very little for the pathologist to do except demonstrate the adenoma. At autopsy, a parathyroid adenoma weighing about 10 Gm. was discovered when we explored the neck. It was a single lesion measuring 3 x 2 cm., rather soft, of a homogeneous pattern, and pale brown in color. It weighed as much as the thyroid; the thyroid weighed 10 Gm.

The subject was an elderly, somewhat emaciated white woman, but no other striking external findings. We looked carefully for any other parathyroid tissue and found none. This apparently is the only parathyroid tissue this lady had, at least that we could determine grossly and microscopically.

The heart weighed 380 Gm. and showed some calcified areas in the aortic valve. I believe these are probably arteriosclerotic in nature and may explain her murmurs. There was some of the same change but to a lesser degree in the mitral valve region. The left ventricle measured 15 mm., which for this lady, was probably on the hypertrophied side. There was marked coronary

atherosclerosis and, as we will see from the photographs, the left anterior descending was almost completely occluded. In association with this there was a mottled ischemic area at the apex of the left ventricle and associated with that was marked thinning of the ventricle to about 2 mm. Grossly, we thought this was a myocardial infarct of rather recent origin.

In the gastrointestinal tract there were no ulcers. She had a number of diverticula in the colon. There was no evidence of pancreatitis.

The left kidney weighed 65 Gm. (normal about 100-110) and the right about 130 Gm. There were no stones in the collecting system nor in the parenchyma of the kidneys. There were multiple retention cysts in the kidney. The cortical surfaces were both coarsely and finely granular, and as I cut the kidney I could see the small arterioles with the naked eye, standing up above the cut surface. Grossly she had a tremendous amount of vascular disease of the smaller vessels of the kidneys. The cortex was thinned bilaterally, but as I said, we found no stones and I think the amount of renal disease she had would be best classified as moderate. Grossly, it was our impression that the changes were on an arteriosclerotic basis.

We might mention the bone grossly. With the limited autopsy, we obtained bone only from the lumbar spine and from the sternum. I can not honestly describe any definite changes in the bone on the gross examination.

I asked Dr. David Murray, of the Department of Pathology to discuss the microscopic findings.

DR. DAVID MURRAY: The bone sections demonstrate multinucleated giant cells; a collection of fibroblasts replace some of the marrow. This is a finding common to several of the bone sections.

The next section is of the coronary artery, demonstrating marked atherosclerosis with great narrowing of the lumen on the right. In the lumen you can see collections of red cells which appear to be a fresh antemortem thrombus. In the myocardium were several changes. There was freshly necrotic muscle, and around this collections

of neutrophils. This indicates that the patient had a fresh infarct of over six hours duration. In addition to this are collections of calcium in the muscle, metastatic calcification. There was congestion of the liver. The kidney tubules showed deposition of calcium or nephrocalcinosis. There was also arteriosclerosis in the kidneys with immense thickening in the arterial wall. This was very common. In addition to that, there were collections of chronic inflammation, cords of inflammation going into the center of the kidney from the cortex, consistent with a chronic pyelonephritis. Scattered around in the renal cortex, some of the glomeruli had a fibrotic thickening. Whether or not this can be construed to be a chronic glomerulonephritis or not, I'm not sure.

The parathyroid gland shows the characteristic chief cells, the large blue nuclei appearing perhaps a little darker staining than usual and are comparatively large. Like many adenomas, the cells vary considerably from area to area. It is fairly uniform, but there are trabeculae—little thin strands of tissue. There are collections of oxyphil cells stained red. About four different types of cells are described in these adenomas. The chief cell is the most common. Dr. Castleman believes the oxyphil cells are of a nonfunctioning type or a less functioning type, perhaps an atrophic type of chief cell, whereas he believes that wasserhelle cell, the "water-clear" cell, is a hyperfunctioning cell.

DR. DUCKWORTH: Is it not correct Dr. Murray, that he believes all cells of the

parathyroid are derived from the chief cell and that the oxyphil cell is the relatively inactive cell and the clear cell the hyperactive cell?

DR. MURRAY: Yes. Should the tissue in an adenoma be adherent to the adjacent thyroid, this could well be a carcinoma. These lesions are usually the biggest one you can find and are bigger than the adenomas. In primary type of hyperparathyroidism, all of the glands will be large and they will weigh collectively between 2 and 70 Gm. and are a mahogany brown color. The ones in the secondary disease are usually creamy gray in color and are enlarged. In primary hyperparathyroidism affecting all four parathyroid glands, the wasserhelle cells predominate. In the secondary type, the chief cells predominate.

DR. DUCKWORTH: Thank you Dr. Murray. We might sum up just briefly here. I believe this elderly lady had at least two processes. First of all, she had an adenoma of the parathyroid which had produced hyperparathyroidism. Secondly, she had a very advanced case of hardening of the arteries, as manifested by the coronaries. I forgot to tell you that we had to decalcify the coronaries before we could make section of them; they were like pipes. This condition led to the recent myocardial infarction. I believe the underlying renal disease because of the vascular changes played a part in her latter days. I believe her failing heart manifested by the infarct and the big liver, exacerbated the renal insufficiency.

## MEDICAL DIGEST

(Continued from page 56)

discredit American Medicine and its organizations and encouraged state and local medical associations to "similarly react to statements appearing at the local level and concerning matters within the respective association's competence and knowledge."

● The Executive Vice President outlined the programs, facilities and activities of the AMA headquarters and the services given by the Association through its various councils and committees to the profession and the public. The Executive Vice-President warned the House that the federal government, the university-medical school complex, and the hospital system is combining "to mold and shape the pattern of health care in this country". He said that this

(Continued on page 106)

### Opening Session



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# President's Page

## THE 1966 STATE AND COUNTY OFFICERS CONFERENCE



DR. BURKHART

At least every two years the Tennessee Medical Association plans and conducts a training program for state and county medical society officers. The State and County Officers Conference this year will be held on Sunday, February 27, 1966, at the Hermitage Hotel in Nashville, Tennessee, beginning at ten o'clock A.M. and lasting until approximately four o'clock P.M. Central Standard Time.

This is an extremely important conference because it has been structured and programmed to deliver a tremendous amount of information in the total time of six hours. It is loaded with speakers of proven competence and knowledge from within and without the medical profession.

The format of the program has already been announced and information concerning it has been sent to those physicians of Tennessee who should attend this meeting, but I would like to just call your attention to a few of the names and a few of the subjects that will be included.

The morning hours will include a symposium on "The Proper Role and Responsibilities of County, State and National Medical Groups" with two TMA physicians discussing the first two parts of this and then Mr. Leo Brown, Assistant to the Executive Vice President of the American Medical Association discussing the third part. The remainder of the morning will be devoted to an address by Mr. Lincoln Williston, Executive Secretary of the Texas Medical Association, on "Stimulating Participation in Medical Society Affairs."

At the noon luncheon, Dr. Hoyt B. Gardner, member of the Board of the American Medical Political Action Committee, will discuss "Medical Practice and Politics." Then in the afternoon Jim Reed, Director of Communications of the American Medical Association, will moderate a panel composed of Lee Anderson, Editor *Chattanooga News-Free Press*, John Reece, Director of Programming WATE-TV, Knoxville, Sam Fleming, President of Third National Bank of Nashville, and Clyde M. York, President of the Tennessee Farm Bureau Federation on a very important subject concerning the image of medicine entitled, "As Others See Us." And then, as if this wasn't enough, the icing is put on the cake the last thing on the program with an address entitled, "Looking Ahead," by Dr. Edward R. Annis, Past President of the American Medical Association. If this isn't a blue-ribbon roster of speakers there never will be one.

Certainly all officers of the Tennessee Medical Association, all county medical society officers, all delegates, all committee chairmen, and all others who are interested in the affairs of medicine in our counties, our state, and our nation, should make every effort to attend this stimulating conference for information, enthusiasm, and challenge.

I know it sounds trite and unoriginal for me to emphasize again that medicine is at a critical phase in its history, but this is quite true and one crossroads is scarcely passed when another is encountered. Only alert and conscientious leadership can guide our profession in these times. Those who have been chosen to serve in such a capacity of leadership surely need all the help they can receive. This conference is for exactly that purpose, and should be utilized to full advantage.

President

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JANUARY, 1966

## EDITORIAL

### CHIEFS OF HOSPITAL STAFFS AND OFFICERS OF COUNTY MEDICAL SOCIETIES—PLEASE NOTE!

On July 1, 1966, the *Medicare Act* begins operation. The law requires that each hospital have a *utilization committee* and that county medical societies have *review committees*. The purpose of the latter is presumed to be for the reviewing of claims presented by patients, doctors, or representatives of third party or governmental organizations.

In 1960, The AMA Board of Trustees expressed interest in the utilization of hospital facilities. Its *Commission on the Cost of Medical Care*, reported out in 1964, included certain conclusions and recommendations adopted by the AMA House of Delegates. Among these were the expressed philosophy that "reviewing and 'policing' utilization and quality controls is a function of the medical profession" and that "medical staffs of hospitals (should) form hospital utilization committees." Further, that

"consumers, third party payers, and government regulatory agencies have established interests in mechanisms for the financing of medical care," and that "Review Committees should be established by state and local medical societies." Though it is said that the Social Security Administration wishes to adhere to current practices if possible, certainty will only be established by the *rules and regulations* which will appear in coming months.

Nevertheless, there is certainty that there will be hospital utilization committees and county society review committees as established by law, irrespective of what functions be assigned to them.

The purpose of this editorial comment is to alert the Chief or President of each hospital staff that a committee on utilization must be functioning before July 1, 1966. And, furthermore, that the Secretary of his local medical society has in his office material from the TMA office to assist the hospital staff in establishing and instructing this hospital committee. The second purpose of this comment is to prompt the officers of the medical society to have established and organized the review committees required under the law.

R. H. K.

### CONFERENCE OF STATE AND COUNTY OFFICERS

The Tennessee Medical Association will hold its fourth biennial conference for officers of TMA and its constituent county medical societies in Nashville at the Hermitage Hotel on Sunday, February 27, 1966.

Outstanding speakers will focus attention on subjects of vital importance to the leaders of organized medicine in Tennessee.

As in the past, the emphasis will be on making information available to county society officers, committee chairmen and others, which will help them do a better job as leaders.

The main portion of the morning session of the conference will be a symposium entitled "The Proper Role and Responsibilities of County, State and National Medical Groups."

The three speakers appearing on the symposium will be Dr. A. Roy Tyrer, of Mem-

phis, Dr. John H. Burkhart, of Knoxville, and Mr. Leo E. Brown, of Chicago. Dr. Tyler is president of the Memphis-Shelby County Medical Society, Dr. Burkhart president of TMA and Mr. Brown is assistant to the Executive Vice-President of the American Medical Association.

"Stimulating Participation in Medical Society affairs" will be the topic of an address following the symposium by Mr. C. Lincoln Williston, Executive Secretary of the 10,000 member Texas Medical Association. Mr. Williston is the past president of the Medical Society Executives Association and annually conducts one of the best state and county officers conferences in the nation.

Conferees will be hosted by TMA at a noon luncheon. Dr. Hoyt D. Gardner, of Louisville, will be the luncheon speaker and he is most qualified to discuss his topic of "Medical Practice and Politics." Dr. Gardner currently serves as a member of the Board of the American Medical Political Action Committee (AMPAC).

The afternoon session will bring together four outstanding persons outside the field of medicine to form a panel for a discussion entitled "As Others See Us." Mr. Jim Reed, Director of Communications for the AMA in Chicago, will act as panel moderator. Panelists will be Mr. Lee Anderson, Editor of the Chattanooga News-Free Press, Mr. John Reese, Director of Programming for WATE-TV in Knoxville, Mr. Sam M. Fleming, President of the Third National Bank of Nashville, and Mr. Clyde M. York, President of the Tennessee Farm Bureau Federation in Columbia. Those attending the conference will have the opportunity to ask questions of any of the panelists following the presentation.

"Looking Ahead" will be the topic of medicine's most articulate spokesman, Dr. Edward R. Annis, of Miami. Dr. Annis, a past-president of the AMA and for many years the standard bearer in medicine's fight against federal intervention, will present an outlook for the future in organized medicine.

There is a constantly increasing need for closer liaison between county, state and national levels of organized medicine. The principal officers of county medical societies

are the responsible link with the state and national organizations. This conference is a *must* for the leaders of Tennessee medicine from the smallest county society to the largest, for it will be these leaders who must be prepared to seize the initiative on the vital issues of medical education, rising health care costs, quality controls, ethics and discipline, and strengthening the medical federation at the state and local levels.

As someone once said, "It's what you learn after you know it all that counts." Mark February 27, 1966 on your calendar now. L. Hadley Williams, Executive Assistant and Public Service Director.

#### EDWARD T. NEWELL, SR., PAST-PRESIDENT

On November 30, death came to "Dr. Ed" after two weeks in the hospital he founded.

Dr. Newell was born in Newellton, Tensas Parish, Louisiana, on May 2, 1876, the son of a well known attorney,—the private attorney of President Jefferson Davis. Early schooling was in the parish school. He received a B.S. degree from Louisiana State University in 1896, and had his medical education at Tulane. He graduated in 1899, at the age of 23 years, cited as the honor-graduate of his class of 100 students. Though a senior student, he became a captain in the Louisiana National Guard when the Spanish-American War broke out, but illness prevented him from joining his regiment when it was ordered elsewhere for training.

After practice in St. Joseph, Louisiana he opened the Newell Infirmary in Chattanooga in 1908. In the following year he was joined by his cousin, Dr. Dunbar Newell and over the years they expanded the original 15 bed infirmary into the Newell Hospital.

In addition to a most active practice carried on until within two years of his death, Dr. Newell contributed much in energy and time to civic and business affairs.

A member of numerous medical societies Dr. Newell, was a senior member of the Southern Surgical Association and had an active role in organized medicine. He served as president of the Chattanooga and Hamilton County Medical Society and represented the Tennessee Medical Association

for a number of years as one of its delegates to the AMA House of Delegates.

In 1917, Dr. Newell was President of the Tennessee State Medical Association and thereafter, as a delegate for life to the House of Delegates of TMA, took an active part in the House affairs for many years.

Dr. Newell has left a name in Chattanooga and Tennessee medicine to stand for generations to come—a name continued by his nephew Dr. Cecil E. Newell and his son Dr. Edward T. Newell, Jr., a member of the TMA Board of Trustees.

## DEATHS

**Dr. Edward Thomas Newell, Sr.**, 89, died November 30th in Newell Hospital in Chattanooga, a hospital which he helped to establish. Dr. Newell was a past president of the Chattanooga-Hamilton County Medical Society and the Tennessee Medical Association.

**Dr. John M. Wilson**, 55, Nashville, superintendent of Central State Hospital, died November 3rd at St. Thomas Hospital.

**Dr. William Lewis McGuffin**, 46, Greeneville, died November 20th in a local hospital. Dr. McGuffin had a heart attack on November 13th and was hospitalized at the time of his death.

**Dr. Ralph Adams**, 57, of Wolfeboro, N.H., well-known lung surgeon, formerly of Woodbury, died November 23rd.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

### Nashville Academy of Medicine Davidson County Medical Society

The Society's annual banquet and installation of officers was held on January 11th at the Hermitage Hotel. The awarding of 50-year pins and remarks by outgoing and incoming presidents were highlights of the program. Dr. William F. Meacham assumed the presidency succeeding Dr. James N. Thomasson. Dr. Greer Ricketson has been named president-elect to take office in 1967. Dr. Frank Womack was elected secretary-treasurer of the Academy.

Recipients of the pins presented in recognition of fifty years in the practice of medicine were Dr. B. F. Byrd, Sr. and Dr. Milton Lewis.

### Roane-Anderson County Medical Society

Ministers of Roane and Anderson Counties were invited to attend the dinner meeting of the Society on November 30th in the Oak Ridge Hospital Cafeteria. Dr. T. Guy Pennington, Nashville, Chairman of the Committee on Medicine and Religion for the Tennessee Medical Association, was guest speaker.

In the business session, the officers of the Society for 1966 were elected and the membership heard the annual report on the affairs of the Roane County Medical Society, Inc. Elected as President, Dr. Henry Hedden, of Clinton; as Vice-President, Dr. Raymond A. Johnson and as Secretary, Dr. Daniel M. Thomas, both of Oak Ridge.

The scholarship committee held its annual meeting in conjunction with the Society's monthly meeting. During the past year the Roane-Anderson County Medical Society has increased its contribution to the University of Tennessee Medical School scholarship fund from \$1,000 to \$1,500 annually and has inaugurated a scholarship donation of \$500 to the Vanderbilt University School of Medicine. The scholarships are awarded to eligible medical students on the basis of need and merit. Eligible recipients who are residents of Roane, Anderson and Morgan counties are given preference.

### Knoxville Academy of Medicine

The Presidential Address by Dr. John O. Kennedy, entitled "The Diagnosis and Treatment of Vulvovaginitis" was presented on December 14th. Committee Chairmen presented annual reports to the Academy's membership. In the election of officers, Dr. George Zirkle was named president-elect to become president in 1967, Dr. Felix Line was named Vice-President and Dr. R. J. Leffler was reelected secretary-treasurer. Dr. Perry Huggin will assume the presidency of the Academy in 1966.

### Sullivan-Johnson County Medical Society

First District Congressman James H. Quillen discussed legislation affecting the medical profession at the monthly meeting of the Sullivan-Johnson County Medical Society on November 18th. The meeting

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was held at the Elks Lodge in Kingsport. Program Chairman for the meeting was Dr. James B. Nichols.

## NATIONAL NEWS

### The Month in Washington (From the Washington Office, AMA)

The Public Health Service has expanded its "pap" test program with a goal of providing cervical cancer tests for most women who enter hospitals and many of those who see physicians for any reason. A total of \$6 million has been allotted for the expanded nationwide campaign. Grants will be made to hospitals, medical schools, state and local health departments and non-government health groups for training of technicians, post-residency training of physicians, purchase of laboratory equipment, examination of hospital outpatients and other such expenditures.

Since last March, the American Academy of General Practice has been implementing for the PHS an office cancer detection program. A PHS spokesman termed the program "most effective," although not costly. The PHS said it expects to achieve its goal in hospital tests within the next five years, with the number of hospitals providing this service to all adult women patients increasing each year during this period.

Hospitals providing care for the poor and medically indigent will receive first consideration in the awarding of grants. These patients have not been tested usually for cervical cancer, the PHS said. PHS Surgeon General William H. Stewart said the new hospital-based screening program reaching high-risk, low-socio-economic groups offered "a truly effective" means of fighting cancer through the "pap" test for early detection.

Although the "pap" test was developed more than 20 years ago, only 20 percent of the nation's 62 million adult women had received the test last year, the PHS said.

The report of the President's Commission on Heart Disease, Cancer, and Stroke proposed a national cervical-cancer detection program as the next logical step to expand

the limited program previously carried out by the PHS' Cancer Control Program. The clinical training programs for cancer control will have \$6 million in funds for the next 12 months, double the amount previously available. The grant-aided programs will be carried out by medical schools, hospitals, and such health groups as the American Cancer Society, the American Academy of General Practice, and state and local health departments.

After President Johnson named the National Advisory Council on Regional Medical Programs to advise the government on programs authorized by the Heart Disease, Cancer and Stroke Law, Dr. James Z. Appel, AMA President, expressed regret that "the AMA was not asked to submit any nominations to this important body."

"Frankly, we are disturbed that the PHS has taken this action in view of our known interest in the ACT and the inclusion before its enactment of the 20 amendments we had proposed," Appel said. "You may remember that one of the amendments incorporated into the final bill was our suggestion that the Advisory Council have final authority in approving or disapproving grant requests rather than only advisory authority as initially provided."

Nonetheless, Appel told the AMA House of Delegates in Philadelphia: "If we provide effective leadership, and if the PHS cooperates, it may be that this law will permit the development of programs which will benefit the public and be acceptable to the profession. I cannot urge you strongly enough, therefore, to take steps now through appropriate state and local society committees to meet with medical school deans, state health department directors, teaching hospital administrators, and department heads in an effort to establish jointly a series of programs under the Act that would be wholly beneficial."

Named to the Advisory Council: Dr. Michael E. DeBakey, Houston, who headed the commission that recommended the program; Dr. John Willis Hurst, Atlanta, the President's heart specialist; Dr. George E. Moore, Buffalo, N. Y.; Dr. Clark M. Millikan, Mayo Clinic, Rochester, Minn.; Dr. Cornelius M. Traeger, New York, N. Y.; Dr.

Leonidas H. Better, Chicago; Mary I. Bunting, President of Radcliffe College; Gordon Cumming, Sacramento, Calif.; Dr. Bruce Everist, Ruston, La.; Dr. William Peebles, Maryland Health Commissioner; Dr. Robert J. Slater, Burlington, Vt.; and Dr. James T. Howell, Detroit.

Surgeon General Stewart will be chairman.



Clinical testing of the experimental drug DMSO has been discontinued by voluntary agreement of the drug sponsors and the Food and Drug Administration. The action was prompted by reports of adverse effects on the eyes of laboratory animals. About 1,000 investigators had been testing the drug on thousands of human patients. Both the American Medical Association and FDA previously had warned that attempted self-medication with the material was dangerous. DMSO is produced as an industrial solvent as well as grades for medical research purposes.



A special advisory committee of non-government medical experts is conducting a comprehensive review of side-effects of birth control pills. The Advisory Committee on Obstetrics and Gynecology was appointed in November by the Food and Drug Administration because of reports that women who had taken oral contraceptive pills had suffered thromboembolic phenomena including strokes, thrombophlebitis and pulmonary embolism, and various eye and vision manifestations. An article in the AMA's Archives of Ophthalmology reported 69 cases of eye ailments, migraine and strokes among women who had taken the pills.

As an interim measure, the FDA directed manufacturers of the pills to put on package labels two warmings—(1) use should be stopped if eye problems occur, and (2) women who have had strokes should not take them.

It is estimated that more than four million American women have been taking birth control pills which are manufactured by seven U. S. drug firms. At its first meeting the seven members of the special

committee—all medical school gynecologists and obstetricians—concluded that there was no immediate need for immediate action on the reports of adverse experience with oral contraceptive pills. The committee believes that "final recommendations . . . can safely await the conclusion of its deliberations."

Two more Committee meetings were scheduled, in January and March. Dr. Joseph F. Sadusk, Jr., FDA Medical Director, said the Committee probably would issue its final report following the March meeting.

The FDA put on computer tape and turned over to the Committee for evaluation all of the clinical reports it had received on suspected adverse reactions from oral contraceptive drugs. The FDA pointed out that it had "emphasized previously that these are naturally occurring conditions in some women which have been noted as far back as medical experience extends."

In a non-related action, a thirteen-member panel, one of 30 making up the White House Conference on International Cooperation, proposed that the United States make \$100 million available over the next three years to help foreign governments carry out family planning programs. The panel also urged that the Federal government set an international example by co-operating with state and local agencies to make birth control information services readily available in this country. Richard N. Gardner, professor of law at Columbia University, headed the panel.

## MEDICAL NEWS IN TENNESSEE

University of Tennessee  
College of Medicine

The National Foundation has approved a \$23,000 grant to establish a Birth Defects Evaluation Center at the University of Tennessee Memorial Research Center and Hospital in Knoxville. Tennessee now has four Evaluation Centers, located in Knoxville, Chattanooga, Memphis and Nashville and is the only state in the South having more than one. Only two other states in

the nation have four centers. There are presently fifty-seven Birth Defect Centers in the United States.



The Board of Trustees of the University has approved the establishment of a graduate school in biomedical sciences in Oak Ridge. The school will be known as "University of Tennessee—Oak Ridge Graduate School of Biomedical Sciences." Approval came following a five-month study by a joint committee from Oak Ridge National Laboratory and UT. Originally, plans were being made to establish the school in the fall of 1967, pending the receipt of appropriations from the 1967 State Legislature. However, Governor Clement has offered to allot \$50,000 from a special state contingency fund if the opening date can be moved forward to the fall of 1966.



A half million dollars has been authorized by the Governor for construction of a large center at the University of Tennessee Medical Units for treatment of the mentally retarded. The money will help make up the balance of \$1,100,000 required to qualify for a Federal grant of \$3,300.00. The Government will pay 75% of the cost and 25% must come from other sources. The proposed center would serve in three broad categories—as a hospital for the diagnosis and treatment of patients, as a research institute to develop new treatment and teaching methods, and as an educational center for the training of specialists to assist the mentally retarded.



Two faculty members at the Medical Units have received national recognition in their respective specialties. Dr. C. C. Erickson, professor of pathology, was named recipient of the annual Papanicolaou Award of the American Society of Cytology. The award, which recognizes outstanding work in cell study, was given for Dr. Erickson's work at UT in uterine cancer detection.

Dr. James Etteldorf, professor of pediatrics, was elected secretary-treasurer of the American Board of Pediatrics and also named to the board's executive committee.



Dr. Maxwell Finland, professor of medi-

cine at Harvard University Medical School, gave a lecture at the Medical Units on November 19th. Dr. Finland, one of the world's leading authorities on bacterial infections, spoke on "New and Serious Infections in Hospitals in the Antibiotic Era." He is the first Neuton Stern visiting professor of medicine, in a program established this year in honor of Dr. Stern, who is clinical professor of medicine emeritus at UT.

### Meharry Medical College

A symposium on recent advances in medicine and surgery was held at Meharry Medical College on November 17th. Sponsors of the program were Meharry and Lederle Laboratories, a division of the American Cyanimid Company. Principal speaker was Dr. Walter C. Alvarez of Chicago, nationally syndicated medical columnist and professor emeritus of medicine at the Mayo Foundation Graduate School, University of Minnesota Medical School.

Other speakers were Dr. Matthew Block, professor of medicine, University of Colorado Medical Center, Denver; Dr. Kermit E. Krantz, professor and chairman of the department of gynecology and obstetrics, University of Kansas Medical Center, Kansas City; Dr. David Yi-yung Hsia, Associate professor of pediatrics, Northwestern University Medical School, Chicago; and Dr. Bentley P. Colcock, member of the surgical staff, Lahey Clinic, Boston. Subjects included treatment of lymphomas, clinical gains in genetics, treatment of peptic ulcer, recent advances in the management of endotoxic shock, diagnosis of diseases of the kidneys and surgery in thyroid disease.

### Two Eli Lilly Seminars Presented in December

The West Tennessee Academy of General Practice and Eli Lilly and Company presented a postgraduate seminar on "Trauma", December 2nd at the Country Club in Dyersburg. Speakers and their subjects were: Dr. James C. H. Simmons, Memphis—"Head Injuries"; Dr. Orin D. Butterick, Jr., Memphis—"Chest Injuries"; Dr. Louis G. Britt, Memphis—"Emergency Room Management"; Dr. Harwell Wilson, Memphis—"Intra-abdominal Injuries"; and Dr. Jerry

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*Side Effects* typical of tetracyclines include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis, dermatitis, overgrowth of nonsusceptible organisms, tooth discoloration (if given during tooth formation) and increased intracranial pressure (in young infants). Also, very rarely, anaphylactoid reaction. Reduce dosage in impaired renal function. Because of reactions to artificial or natural sunlight (even from short exposure and at low dosage), patient should be warned to avoid direct exposure. Stop drug immediately at the first sign of adverse reaction. It should not be taken with high calcium drugs or food; and should not be taken less than one hour before, or two hours after meals.

*Average Adult Daily Dosage:* four divided doses of 1 capsule each or two divided doses of 2 capsules.

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T. Francisco, Memphis—"The Physician's Responsibility to Truth."

Also on December 2nd, the following program was presented in Lawrenceburg by the Nathan Bedford Forrest Chapter of TAGP and Eli Lilly. "Treatment of the Patient with an Abnormal Pap Smear" by Dr. Gordon Peerman, Nashville; "Changing Indications for Cesarean Section and Tubal Ligation" by Dr. Russell Birmingham, Nashville; and "New Laboratory Procedures Used in Obstetrics and Gynecology" by Dr. John Fletchnor, Nashville. Drs. Peerman, Birmingham and Fletchnor also presented a panel discussion entitled, "New Techniques and Procedures in Obstetrics and Gynecology." A question and answer period followed each presentation.

ders, Memphis, Chairman of the Section on Otolaryngology; **Dr. Robert M. Ruch**, Memphis, Secretary of the Section on Gynecology; **Dr. John B. Dorian**, Memphis, Chairman of the Section on General Practice; and Dr. **James O. Fields**, Milan, Secretary of the GP Section.

**Dr. Arnold Meirowsky**, Nashville, delivered a talk on "Evolving Concepts in Head Injury Management" before the Society of Medical Consultants to the Armed Forces in Washington, D. C. on November 22nd.

**Dr. Lawrence D. Amick**, Memphis, was the featured speaker at a recent meeting of the West Tennessee Chapter of the American Physical Therapy Association.

**Dr. Homer F. Mincey**, superintendent of Greeneville schools, was elected vice president of the East Tennessee Education Association at the Association's annual meeting in October.

**Dr. Benjamin H. Caldwell, Jr.**, Nashville, announced the opening of his office for the practice of obstetrics and gynecology.

## PERSONAL NEWS

**Dr. Jorge A. Picaza**, Memphis, former Havana neurosurgeon, has been honored by the American College of Surgeons for his work in epilepsy. The organization presented a silver medallion to the 46-year old specialist at a "Symposium on Spectacular Problems in Surgery."

**Dr. Robert S. Caradine, Jr.** announces the removal of his office to 1707 Madison Avenue, Memphis. His practice is limited to Gynecology and Obstetrics.

**Dr. Arnold Meirowsky**, Nashville, has assumed the presidency of the Middle Tennessee Medical Association succeeding **Dr. J. T. Jackson**. **Dr. Thomas G. Pennington** of Nashville was re-elected secretary-treasurer.

**Dr. Robert Merrill** was guest speaker at a recent meeting of the Auxiliary to the Nashville Academy of Medicine. Dr. Merrill's subject was "The Problem of Handicapped Children in Nashville."

**Dr. Thomas W. Williams** has opened his office for the practice of medicine in Benton.

**Dr. William Gardner Rhea, Jr.**, Paris, has been certified as a diplomate of the American Board of Surgery, Inc. and of the American Board of Thoracic Surgery, Inc.

"Medicare: The Law, Now What?" was the subject presented by **Dr. Thomas Zerfoss** at a meeting of the Nashville Republican Club on November 29th.

**Dr. Arliss H. Tuttle**, Memphis, has been elected to fellowship in the American Academy of Pediatrics.

Tennessee physicians elected to offices of Sections of the Southern Medical Association are: **Dr. William H. L. Dornette**, Memphis, Chairman of the Section on Anesthesiology; **Dr. Sam H. San-**

## Special Item

*Members of the profession largely have not had the time or the inclination to study the Medicare Law and how it will affect the practice of medicine. It is difficult for the busy practitioner to read such a legal document and interpret it in terms of his daily activities in carrying out his life's objectives.*

*The Connecticut State Medical Society has had an analysis made which sketches the outline of the probable "workings" of Medicare. Obviously, the complete picture must await the regulations now being filled in by the bureaucrats. We thank Connecticut Medicine (Suppl. Nov. 1965) for permission to reprint this material.—Editor*

### The Medicare Law—P.L. 89-97 An Assessment of its Professional Implications

#### Preface

Prior to the enactment of the Social Security Amendments of 1965, which embody the new Medicare Law, the position of American medicine on compulsory, tax-supported "social" financing of health services had, of necessity, to be expressed in more or less hypothetical terms; i.e., if this legislative proposal or that were to be passed, its effects on the patient-physician

relationships and the quality of medical care would *probably* be thus-and-so. Since such a revolutionary scheme had never been tried out in the United States, it was not possible for anyone to say with certainty just how it would work.

Furthermore, the testimony presented by spokesmen for the profession to committees of Congress on a succession of "medicare" bills (Murray-Wagner-Dingell, Forand, King-Anderson, and others) was heard rather exclusively by legislators—a very limited audience at best, and, as each of the earlier measures failed to gain widespread support, the views of organized medicine concerning them were buried in the archives where records of this kind are filed away for posterity.

Consequently, most people in this country—and, indeed, most of the doctors, have never before had to come to grips with the realities of massive intervention of Federal government in the field of personal health services; neither patients nor physicians have been prompted in the past to do more than speculate in the abstract as to what major changes, for good or for bad, the enactment of such a law would cause in the traditionally voluntary system of American patient care.

Today, however, the situation has been drastically altered. Final passage of the Medicare Law has lowered the curtain on almost twenty years of debating the "idea" of the legislation. The long debate has been ended, and now attention must be turned at once toward putting the theories of social health insurance into practice in our nation—toward the drafting of a multitude of rules and regulations by the various Federal agencies responsible for promulgating, administering and controlling the different programs provided for by the Law, and toward the drafting of "livable" positions of accommodation to those rules and regulations by all who will shortly become subject to their enforcement.

In this new climate which Congress has created, wherein medical practice and Federal statutes have been made inseparable bedfellows, the long-ignored fundamental issue of so-called "socialized medicine" has finally been brought into sharp focus. For

the patient, it will be the right—or lack thereof—to continue to exercise freedom of choice in arranging for his personal health care. For the doctor, it will be the right—or lack thereof—to continue to exercise freedom of judgment in making professional decisions of vital importance to those he serves.

The Congress took nearly two decades to reach agreement on the final provisions of Medicare—a considerable period of time. But the basic medical tenets which guide and discipline today's practitioner in his chosen work have been forged during the passage of several centuries—a very much longer period of time. The former are as yet theoretical and untested; the latter have withstood their trial by fire, over and over again.

In this current atmosphere of radical change and widespread uncertainty, it is felt that the responsibility of medical leadership is not so much to formulate *new* rules of professional conduct for physicians under the Medicare statutes of 1965, as it is to reaffirm and redefine for the practitioner those long-established principles which have carried American medicine to its present high level of achievement, and to assure, to the greatest degree possible, that those principles will not have to be abandoned or even seriously compromised in the critical years that lie ahead.

It is in the spirit of attempting to discharge this latter responsibility that the Connecticut State Medical Society has prepared this assessment of the professional implications of Public Law 89-97 for perusal by its members.

### I. General Considerations

By an act of the 89th Congress, commonly called the Medicare Law, the Federal government has been empowered to enter into contracts with practically all persons age 65 and older, and with many persons in other special categories, to make cost-controlled payments on their behalf to the providers of certain institutional services and certain other health services, all such contracts to be subject to stringent conditions embodied in the Law itself and to additional rules and regulations which the

Law authorizes the Secretary of Health, Education and Welfare to impose immediately, and from "time to time" thereafter.

It is emphasized, and should be recalled frequently, that none of the Medicare contracts outlined above will, in any *literal* sense, make the Federal government responsible for "paying the medical bills" of these millions of potential beneficiaries. As a matter of fact, the Law clearly stipulates that the providers of all health services will be reimbursed *solely* on the basis of "reasonable costs or charges," and that the standards of "reasonableness" will be set by the Secretary of HEW for each category of providers.

It is further stressed, now and for future reference, that the primary *legal* parties to all such contracts are actually only two in number; i.e., the Federal government and the persons who are ruled eligible to receive the covered services at taxpayers' expense. The election to become a legal *third* party to any type of Medicare contract—in particular, by the providers of health services—is ostensibly entirely voluntary under P.L. 89-97.

However, once such a provider has applied to the Secretary for certification to furnish services and be reimbursed for same, and has been so certified, it will be mandatory for the provider to enter into a binding legal agreement to furnish services in strict conformance with HEW regulations and to accept payments on the basis of HEW determinations of "reasonable costs or charges." While under contract, the provider will be expected to yield to rulings of the Secretary whenever questions of Medicare's administration arise, since the authority vested in him appears to be both all-inclusive and final in these matters.

If the various types of health services could be pigeonholed, so as to make each type a separate and discrete entity, it might be possible for one category of providers to enter into contracts with HEW without involving other categories of providers in any way. Unfortunately, this possibility seems unlikely to be achieved. For example: In order for a Medicare patient (under contract) to receive hospital services at government expense, and for a hospital

(also under contract) to receive payment for services rendered to that patient, it is required that the attending physician (*not* under contract) be asked to complete and file one or more forms certifying to the "medical necessity" of the patient's admission to, and continued stay in, the hospital. The professional implications of some of these "cross-overs" of obligation between Medicare contractors and non-contractors will be evaluated further on in this assessment.

## II. The Medicare Law and the Practicing Physician

Ever since President Johnson affixed his signature to the Social Security Amendments of 1965, a great deal of discussion has been engendered in both professional and public circles as to the "legality" of a physician's personal decision not to take part, or to take only a limited part, in the several types of health benefits programs provided for under P.L. 89-97. At the moment, it may be said that much of this discussion is rather academic since very few people are as yet competent to even interpret the meaning of the major provisions of the law, let alone to render final verdicts as to their legal implications.

In general, however, it is reasonably safe to say that, insofar as compulsory or involuntary involvement of the doctor of medicine is concerned, there appear to be no clearly defined provisions of the Law that will directly compel the private practitioner to depart from his "usual and customary" methods of rendering patient care, either as to diagnosis and treatment or as to making charges for his services. The Law seems to be most specific in this regard.

In precise and presumably unmistakable language, under the featured heading of "*Prohibition Against Any Federal Interference*," Title XVIII, Section 1801, declares: "*Nothing* in this title (Health Insurance for the Aged) shall be construed to authorize *any* Federal officer or employee to exercise *any* supervision or control over the practice of medicine or the manner in which medical services are provided. . . ."

From a lay (non-legal) standpoint, this apparently unqualified disclaimer of Federal interference in the practitioner's usual and customary medical care of his patients seems in perfect accord with Section 6 of

the *AMA Principles of Medical Ethics*, which reads:

"A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or cause a deterioration of the quality of medical care."

In the light of such evident harmony between the intent of Congress and the intent of this ethical principle, it appears unwarranted to so much as speculate that the Secretary of HEW would ever try to impose, or that a physician would ever be asked to comply with, any rule or regulation of Medicare which might tend to violate the spirit of either. In Section 1801, the government has plainly certified the ingredients of the Medicare "pudding" to be pure and entirely safe for the doctor's consumption. It is unthinkable that the "eating" might furnish proof to the contrary.

Hence, if this new Law means what it says and is promulgated completely within that meaning, it is difficult to conceive that the doctor who practices competent and ethical medicine could ever be found to be acting "illegally" with respect to P.L. 89-97 or any other statutes. Further, it is hard to imagine why it would be necessary for such a physician to change his usual and customary methods of practice when treating Medicare cases, unless he elects to contract with the Department of HEW or one of its fiscal agents to do so.

The foregoing is intended to inform the doctor of medicine concerning the legal implications of Medicare (insofar as they are now understood) as it appears they may apply to him personally in his practice. However, it is expected that for every basic provision of P.L. 89-97 there will be established a host of regulations with which to promulgate it, and nothing in this assessment is meant to suggest that these myriad regulations may not "rub off" on him to some extent in their over-all enforcement.

It must be kept in mind that the practitioner frequently renders patient care in concert with other providers of health services, such as hospitals, convalescent facilities and home treatment agencies. As reported (Section I) previously, the Law states that providers like these must enter

into agreements with HEW in order to qualify to receive Medicare payments, and that, in so doing, they must also agree to furnish services in conformance with regulations. It is in those areas of what have already been referred to as "cross-overs" of obligation between Medicare contractors and non-contractors that the physician may find himself confronted with situations in which *indirect* bureaucratic pressure may be brought to bear on him to alter or even completely change his medical judgments when Medicare cases are involved. The principal source of such pressures will probably be Title XVIII, Part 1-A—"Hospital Insurance Benefits for the Aged." Some of these potential problems will be considered at length in the section that follows.

### III. Part 1-A—The Program of Hospital Insurance Benefits

Part 1-A of Title XVIII provides a program of benefits for inhospital services (effective July, 1966), outpatient hospital diagnostic services (effective July, 1966), post-hospital home care services (effective July, 1966), and extended care services in approved convalescent facilities (effective January, 1967). As has been pointed out earlier, the government will make cost-controlled "payments" to certified providers of such services, rather than "pay the bills" of same, but there can be no doubt that Part 1-A provisions will relieve some 15-20 million persons age 65 and older of much of the responsibility of meeting incurred expenses for these services out of personal or voluntary insurance resources. Since no "means test" is to be applied under this part of the Law, wealthy and poor will benefit alike, and all will be subject to the same rules and regulations that the Secretary of HEW eventually lays down for administration of the plans.

Part 1-A contracts will authorize *no* payments to be made to the Medicare patient's attending physician for services rendered in any of the institutions or home care agencies under contract to HEW. Unless the Law is amended before its implementation in 1966, or unless subsequently imposed regulations permit some looseness in the Law's interpretation, this exclusion will apply with equal stringency to the so-called

"hospital based" specialties; i.e., pathology, radiology, anesthesiology and physiatry. The AMA has supported, and will continue to support, the positions in this regard adopted by the national boards and colleges of these groups of practitioners; i.e., that such services are *medical services*—not *hospital services*, and that patients should be billed for same by the physicians rendering them. On that account, it is not the purpose of this assessment to furnish members of the Society with definitive information about the probable scope and duration of institutional coverage, the beneficiaries will be given under Part 1-A.

It is expected that such details, when finally drawn up by the Secretary et al., will become available to the public and the profession from official government sources. Parenthetically, it may be said that Medicare "facts and figures" obtained from other sources (especially from commercial ones which are being rushed into print) may be so oversimplified as to be misleading.

#### The M.D. as a Source of Medicare Information

At the present time, the Department of Health, Education and Welfare, the Social Security Administration, the U. S. Public Health Service and other involved Federal agencies are said to be experiencing nightmares of confusion in trying to come up quickly with literally thousands upon thousands of Medicare regulations which will not contradict each other or be reduplicative in their application to the various programs to be made operational under the Law. Hence, for the moment, P.L. 89-97 must be looked upon only as broad "enabling legislation" which, in itself, is not suitable for any but experts to interpret. For this reason, it would be most unwise for the Society to try to furnish its members with specific analyses of the Law now, or until all the facts have been made known.

For the same reason, it would seem equally unwise for the physician to attempt to advise his elderly patients in these matters, especially in regard to their possible entitlement to benefits under its various parts and the specific nature of such benefits. Unless the doctor himself fully understands every section and subsection of the Law, his ad-

visements will more likely misinform patients than enlighten them.

As a case in point, the practitioner might venture a guess as to what he would offer as a meaningful interpretation of the following:

"Section 1814 (a)—Except as provided in subsection (d), payment for services furnished an individual may be made only to providers of services which are eligible therefor under section 1866 and only if—(1) written request, signed by such individual except in cases in which the Secretary finds it impractical for the individual to do so, is filed for such payment in such form, in such manner, within such time, and by such person or persons as the Secretary by regulation may prescribe; . . ."

Since in this and almost every other section of the Law the Secretary is authorized to impose regulations, and since no clearcut definition is given as to what the "Secretary may by regulation prescribe" or may change "from time to time," most physicians may well conclude that it would be greatly to their patients' advantage for them to suggest that the answers to all questions on Medicare be sought directly from the Social Security office administering the Law at local level. HEW and other involved Federal agencies are reported to be hiring tens of thousands of additional employees for this purpose, and they will probably be trained to try to answer such questions in language the average person can understand. Those who have read through P.L. 89-97 can appreciate that the task of these clerks will not be an easy one.

#### Expected Utilization of Hospital-Type Services

Most hospital administrators, convalescent facility operators, and other experts in institutional care are predicting that when Part 1-A benefits become available in July, 1966 and thereafter, the demand for admission to hospitals and related facilities will immediately increase 20-35 per cent due to an influx of patients age 65 and older. Undoubtedly some of these admissions will be justifiable on the basis of medical need—a need previously unmet because of financial inadequacy to pay the bills. It is anticipated, however, that such cases will constitute a minority; i.e., a National Blue Cross vice-president recently told the House Committee on Ways and

Means that his organization was "unaware of the existence of any appreciable segment of the over-65 population that has been going without essential hospital treatment."

On the other hand, say the experts, vast numbers of older people are expected to seek admission to hospitals and nursing homes on the grounds that they have become entitled to such services "as a matter of right"—a promotional phrase used over and over again in recent years by the advocates of Medicare legislation. Hence, many aged persons whose only need is for custodial care (*not* covered at all under P.L. 89-97) are likely to put pressure on physicians to issue them certificates of "medical necessity," without which, by HEW regulations, hospitals and similar institutions cannot admit them, or, once admitted, allow them to remain as inpatients beyond certain stipulated limits.

Should these educated predictions prove to be well-founded, the private practitioner of medicine may well find himself cast in the role of "policeman" for the Hospital Insurance Benefits program—a role he may be most reluctant to assume, and one which is surely not assigned to him by any provision of the Law. Under such circumstances, adherence to usual and customary methods of admitting and discharging Medicare patients may be made extremely difficult for him.

On the one hand, if his medical judgment in this regard happens not to be pleasing to an older patient or a relative of same, he may become a target for criticism and animosity. It is not beyond the realm of possibility that such displeased persons might even try to "make trouble" for him if he does not yield to their demands, perhaps attempting to discredit his medical judgment by "shopping around" among his colleagues for a contrary opinion or seeking to hold him responsible for unrelated complications which developed at some later time.

On the other hand, he will not really solve anything by "letting down the bars" in this matter and, to conserve his time, accede willy-nilly to the desire of the patient (a practice resorted to, in desperation, by many doctors working under socialized medicine in Great Britain and elsewhere.) Since each institution under contract to HEW will have

a "utilization review committee" to check on the medical necessity of every admission, it is doubtful that such a liberal policy would go unnoticed for very long or that, when detected, its further pursuit could not place the physician's staff privileges in some degree of jeopardy. To the extent that Medicare regulations imposed by the Secretary on all contracting institutions become embodied in the "rules of the staff" of an institution, to the same extent the physician will probably be held responsible to comply with them in full. Any claim that he, himself, is not under contract to HEW may be looked upon by the institution's administration as rather academic and, in any event, irrelevant. It would therefore appear that the proposed relationship between HEW rules for controlling utilization (costs) and existing staff rules governing professional conduct recommends itself as a subject for careful study by the joint conference committee of the staff and the board of directors of each institution that intends to participate in the programs under Part 1-A.

It almost goes without saying that the primary objective of the physician will be to continue to do what is best and proper for his patients, but it may be found that good intentions alone will not suffice in the new medical environment created by P.L. 89-97. Those who have become accustomed to the simplicity of admitting and discharging patients covered by Blue Cross and other voluntary plans may find themselves caught on the horns of a dilemma in trying to deal satisfactorily with some of the potential problems just described. Certainly the physician should not be expected to waste valuable time debating "medical necessity" vs. "matter of right" when an older patient or relative seeks his certification for admission to, or prolonged stay in, an institution. Neither should he be expected to risk damage to his professional reputation in the community by being unduly firm in judgments of this kind or in the hospital by being too lax in them.

Probably only first-hand experience with these regulations of Medicare will enable the practitioner to develop workable guides for complying with them in an ethical manner. However, at least one possible "rule-

of-thumb" may warrant careful prior consideration by each member of the Society; i.e., should the patient question the validity of his judgment concerning the "medical necessity" for a primary admission, it would appear to be both legal and ethical for him to insist that prompt consultation be held with another qualified physician who is on the staff of the institution involved. It is often claimed that "two heads are better than one," and, if this be so, such consultation might do a great deal to protect the interests of all concerned. The question of prolonged stay will be taken up under "The Role of the Utilization Review Committee."

#### **Admitting and Discharge Procedures**

As has been stated previously, and exemplified at some length in the immediately foregoing section, certain provisions of the Hospital Insurance Benefits program may indirectly present problems to the private practitioner in his management of a Medicare case. These may vary in significance from the mere mechanical (but often expensive) drudgery of filling out numerous government forms, to the far more weighty ones raised by his being asked to yield in his professional judgments to cost-oriented regulations which seem destined to become integral parts of the binding agreements into which institutions must enter with the Secretary of HEW. In the discussion of several of these matters which follows, it is well to stress again that inhospital services of the attending physician are not covered for payment under Part 1-A and, therefore, that none of the required forms and certificates he will be asked to complete are for his benefit in any way.

(1) *Completion of Required Forms:* Section 1814(a) reads:

"Except as provided in subsection (d), payment for services furnished an individual may be made only to providers of services eligible therefor under section 1866 and only if . . . (2) a physician certifies (and recertifies, where such services are furnished over a period of time, in such cases, with such frequency, and accompanied by such supporting material, appropriate to the case involved, as may be provided by regulations, except that the first of such recertifications shall be required in each case of inhospital care not later than the 20th day of such period)."

From the wording of this section (and other similar sections applying to extended-

care facilities and home-care agencies), it can be deduced that the Medicare patient's attending physician will be asked to complete and file a substantial number of forms if the patient is to receive authorized services and if the institution is to be paid for furnishing same. At this writing, the simplicity or complexity of the forms which will be issued for such certification and recertification purposes is not known, nor are the details of what is meant by "supporting material." It seems evident, however, that one or more of the following considerations may present themselves to the practitioner in completing and filing these documents:

(a) *Privileged Information:* In completing documents such as applications for life insurance, the physician is often asked to divulge privileged information concerning his patient's past and present health status, and he complies with such requests only when they are accompanied by written authorization from the patient for him to do so. By obtaining prior authorization, his compliance is not out of keeping with the intent of Section 9 of the *AMA Principles of Medical Ethics*, which reads:

"A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community."

As far as is known, the pertinent provisions of P.L. 89-97 are not intended to encompass the meaning of either of the exceptions ("law" and "welfare") stipulated in Section 9 of the *Principles*. Hence, in completing Medicare forms, it would seem advisable for the practitioner to continue his usual and customary procedure in this regard; i.e., if the forms ask him to divulge privileged information, he comply only after obtaining written consent of the patient to do so.

(b) *Time-Cost Factors:* Should the forms provided for certification and recertification purposes under Section 1814 (a) of Part 1-A prove to be brief and simple, requiring only a few moments of the physician's time to complete, it is doubtful that he would wish to assess any charge for this service. From past experience with government-operated

programs, however, it is equally doubtful that these forms will be of a succinct nature.

If the forms prove to be lengthy and/or complex, it seems inevitable that either the physicians or his office personnel or both will be called upon to spend a good deal of time and effort to complete the required documents, particularly with reference to the "recertification" and "supporting material" regulations. In such event, and the practitioner is considering whether to assess or not to assess a charge for this demand upon his time and person, he may choose to be guided by a relevant policy of the Connecticut State Medical Society which reads:

"The physician shall be responsible for completing for the patient such reasonable claim forms as may be required by third party agencies, and for preparing and furnishing, at appropriate cost, such other statements or certificates concerning the patient's health status as may be requested by the patient or by persons or agencies authorized by the patient to obtain such documents from the physician."

The Medicare Law, as written, does not appear to include payment for this service of the attending physician under the provisions of Part 1-A. Neither does the Law indicate on whose behalf the physician will be performing the service; i.e., for the patient, for the institution, or for the Secretary of HEW. In the absence of direction from P.L. 89-97 in this regard, and unless some future regulation affords clarification, the practitioner may find suitable guidance in this matter by referring to another policy of the Society which reads:

"The patient (or his legal relative or guardian) shall be responsible for payment of the physician's fee."

Under Part 1-A, the Law clearly establishes precedents for placing responsibility on the patient to pay for services which are over and above those for which the government will assume financial liability. For example: The patient must pay \$40 out-of-pocket (or from other sources) for each "spell of illness" which requires up to sixty days of inpatient hospital care, and an additional \$10 per day for further hospitalization from the sixty-first day on through the total of ninety days which are allowable. The hospital is authorized to collect these amounts directly from the patient or his agent. This "direct charge" provision also

applies to convalescent facilities and to certain other providers of services.

Therefore, while not so stated in the Law, it would appear that the physician would be acting both legally and ethically if he followed a similar direct billing procedure with respect to his charges for completing forms and certificates which he considers to exceed "reasonable" limits. It is expected that, in assessing charges for this type of service, most physicians would follow their usual and customary practice of modifying their fee to accommodate the patient in reduced circumstances or even waive such fee if the situation warrants. It is pertinent to recall, however, that entitlement to "free" benefits under Medicare is not based on income or ability to pay, but on age—65 years and older. Hence, Medicare entitlement and medical indigency are not necessarily at all synonymous in this context.

Should such a billing be questioned, the physician may wish to suggest that the patient or a legal relative or guardian seek resolution of the question from the local Social Security office. He might also wish to suggest that his county medical association be asked to rule on the propriety of his charge.

#### The Role of the Utilization Review Committee

Under the Law, as enacted, it will be required that each hospital and convalescent facility under contract to the Department of HEW have a "utilization review committee." The ostensible purpose of this committee will be to promote "the most efficient use of available health facilities and services," a purpose which almost anyone would look upon as commendable. However, it seems clear that this committee will also serve as an indirect agent of the Secretary and be empowered to enforce his rules and regulations with respect to the admission, discharge and transfer of Medicare patients to and between hospitals and extended-care facilities, and, as well, to rule on the "medical necessity" of all treatment prescribed by the patients' attending physicians.

The law provides that such a committee may be

"either (A) a staff committee of the institution composed of two or more physicians, with or without the participation of other professional person-

nel, or (B) a group outside the institution which is similarly composed and (i) which is established by the local medical society and some or all of the hospitals and extended-care facilities in the locality, or (ii) if (and for so long as) there has not been established such a group which serves such institutions, which is established in such other manner as may be approved by the secretary."

As defined by statute, three duties of the utilization review committee are as follows:

"... review, on a sample or other basis, of admissions to the institution, the duration of stays therein, and the professional services (including drugs and biologicals) furnished (A) with respect to the medical necessity of the services, and (B) for the purpose of promoting the most efficient use of available health facilities and services"; and

"... review, in each case of inpatient hospital services or extended-care services furnished to such an (eligible) individual during a continuous period of extended duration, as of such days of such period (which may differ for different classes of cases) as may be specified in regulations, with such review to be made as promptly as possible, after each day so specified, and in no event later than one week following such day"; and

"... (make) prompt notification to the institution, the individual, and his attending physician of any finding (made after opportunity for consultation to such attending physician) by the physician members of the committee or group that any further stay in the institution is not medically necessary."

In normal practice, such decisions as admitting and discharging patients and prescribing courses of treatment for them are left to the medical judgment of the attending doctor. Although most hospitals already have utilization committees, they presently operate intramurally as a function of the medical staff and are not subject to control by agencies outside the institution. Further, their concern is solely with the proper utilization of institutional facilities by members of the staff; not with the medical management of their private patients. In the latter area, the quality of care being rendered in the hospital by staff physicians is continuously being evaluated by other appointed agents of the staff; i.e., by surgical audit committees, morbidity and mortality committees, tissue committees, and the like. A high quality of care is also fostered by department heads through rules such as mandatory consultation with qualified physicians in complicated or unusual cases.

The language of P.L. 89-97 strongly sug-

gests that the utilization review committees called for under the provisions of the Hospital Insurance Benefits program will differ substantially and in several ways from those with which most practitioners are now familiar. In the first place, the committee will review "each (Medicare) case," in the manner and at the times that regulations will specify, as to the "medical necessity" of the admission itself and the need for "any further stay" in the institution. In the second place, the committee will pass similar judgments on the necessity of the hospital-type services which are prescribed by the attending doctor. And finally, it may be placed under greater primary obligation to comply with the cost-oriented rules laid down by HEW than to further the medical interests of the patient.

The language of the Law also strongly suggests that should there be a difference between the judgment of the physician members of the committee and that of the attending physician (whether opportunity for consultation with him has been consummated or not), the judgment of the committee members will prevail.

Should such a difference of medical opinion occur, irrespective of whether the difference involves admission, discharge, transfer, treatment, or some other important aspect of patient care, it seems likely that grave ethical questions might be raised. On the one hand, the attending doctor could be under pressure to yield in his judgment to rules imposed by HEW. On the other, he would also be expected to continue to assume full professional responsibility for the management of the case. Assessed by existing standards, such a position would be considered ethically untenable.

To assist members of the Society in resolving questions of this type in a medically acceptable manner, it is suggested that they review again and be guided by Section 6 of the *AMA Principles of Medical Ethics*. The harmony between this principle and the government's pledge of absolute non-interference with practice has been pointed out previously.

However, should the physician be subjected to administrative pressure to comply with HEW regulations and be prevailed upon to yield in his judgment to those reg-

ulations, it is strongly suggested that he do so only after obtaining from the chairman of the utilization review committee a written statement transferring from himself to the committee full responsibility for any and all deleterious effects the patient may suffer as a consequence of the committee's ruling that the treatment *he* felt to be appropriate was not "medically necessary." A copy of the signed statement could then be made a permanent part of the patient's hospital record, accompanied by a written statement of the attending doctor's contrary opinion. Should the chairman decline to furnish the statement requested, it would seem wise to make detailed note of same on the chart.

Such a policy of insistence on "rendering unto Caesar that which is Caesar's" should prove to be unassailable, both legally and ethically. It is true, of course, that notification by the committee that no further stay in the institution is necessary does not actually mean that the patient will be compelled to leave. It is assumed that it will mean only that the government has been relieved of all responsibility to pay for his care any longer; i.e., he will have been put "on his own." If his doctor writes a "stay" order and the patient can afford to do so, it is possible he may be allowed to receive further inpatient treatment. If he cannot afford it, or refuses to pay "as a matter of right," it is not known what the consequences may be.

In any event, this problem for the patient will not have been created by his attending physician but by the provisions of the Law, and it is certainly not the responsibility of the practitioner to furnish a solution. Perhaps the institution's administrator or social workers could be of assistance to the patient in such cases (which will probably be quite rare) or, in extreme situations, perhaps only an attorney will be able to clear up the confusion.

It is said that the shoemaker should stick to his last. In dealing with Medicare problems having primarily legal connotations, it would seem only logical for the physician to avoid becoming intimately involved.

### The Prescribing of Drugs

While the Hospital Insurance Benefits Program authorizes payment for most services by lumping them together as "services ordinarily furnished by the hospital for inpatients," it is a good deal more specific with respect to drugs and biologicals.

In these categories, payment is authorized for

"only such drugs and biologicals, respectively, as are included in the U. S. Pharmacopoeia, the National Formulary, the U. S. Homeopathic Pharmacopoeia, or in New Drugs or Accepted Dental Remedies, . . . or those approved by the pharmacy and drug therapeutic committee of the medical staff of the hospital for use in that hospital."

Of these two options, it seems reasonable to assume that the latter might be preferable in most cases, since a formulary developed by a committee of the hospital staff would be more likely to reflect medical orientation than cost orientation. This is another matter which strongly recommends itself for careful study by the joint conference committee of the staff and the board of directors of each institution that is planning to participate in programs under Part 1-A.

However arrived at, it is clear that the formulary will be an integral part of the institution's contractual agreement with HEW which qualifies it to receive payments for goods and services furnished to Medicare beneficiaries. It will, therefore, be subject to ultimate and final approval by the Secretary.

Should the formulary, as approved by HEW, be broad and comprehensive in scope, the attending physician may anticipate little difficulty in prescribing the pharmaceuticals of his choice. But should the formulary prove to be narrow and restrictive as to selection, the doctor may be placed under pressure to prescribe "Brand X" for the reason that the drug or biological he prefers is not "approved" for payment as a Medicare benefit. Connecticut practitioners have had some experience with restrictive formularies. Several years ago, the Welfare Department issued a "generic drug" directive applying to all patients on public assistance but wisely modified that directive a short time later when members of the profession protested vigorously against it.

Once again, it is suggested that the physician be guided by Section 6 of the *AMA Principles of Medical Ethics* in determining to what extent he can ethically modify his own professional judgment to accommodate non-medical regulations which are imposed primarily to control costs.

It should also be kept in mind that the Medicare Law (like the Welfare Department directive just referred to) does not actually prohibit the use of any recognized form of therapy by the practitioner or deny same to the patient. It only limits payment for therapy to those forms approved as benefits under the contract between the institution and HEW. On this account, there appears to be no legal reason for the physician to depart from his usual and customary methods of prescribing drugs and biologicals for Medicare patients under Part 1-A provisions, albeit he should keep in mind that patients will be held responsible to pay for such goods and services as are not approved as benefits under Part 1-A contracts with institutional providers. The legal precedents for "direct billings" to the patient when services are not covered have already been referred to in this assessment.

#### IV. Part I-B—The Supplementary Voluntary Insurance Program

Under Part 1-B, the Medicare Law establishes a supplementary "voluntary" insurance program to provide coverage for certain health services (exclusive of that provided under Part 1-A) for individuals age 65 and over who elect to enroll in it. The plan will be financed, on a joint basis, from "premiums" paid by the enrollee (\$3 a month) and from general revenues appropriated by the U. S. Treasury (a matching \$3 a month). In the case of persons ruled eligible for public assistance (in particular, under the expanded Kerr-Mills Law—Part 2), each state will be authorized to pay the enrollee's share of the monthly premium for him.

The Congress appears to have drafted the provisions of this supplementary program in a rather bizarre manner. It did not, as one might have expected, spell out the coverage it wanted to have included in the contracts and then ask private carriers and prepayment plans to bid competitively on the basis of calculated utilization and costs.

Instead, it arbitrarily set the premium to be charged at \$6 per month, gave general definition to the intended coverage only as "medical and other services," and turned over to the Secretary of HEW practically absolute control over every important aspect of the program's administration; i.e., enrollment policy, methods of payment, final determination of what will be considered "reasonable costs or charges, and even authorizing him to enter into contracts with insuring agencies without regard to the requirements of law concerning competitive bidding.

From the public's standpoint, little or nothing is known at this writing about what form the contracts under Part 1-B will take when they are finally promulgated. The Law states that they may include such items as physicians' services, certain drugs and biologicals, hospital and convalescent services supplement to those covered by Part 1-A, radiation therapy (materials and technicians' services), rental of durable medical equipment, approved private laboratory services, and so forth. In addition, the contracts will feature a \$50 annual deductible and 20 per cent co-insurance (both to be paid by the patient).

It is emphasized that these items may be included; not will. After trained insurance actuaries finish estimating the probable loss ratios for all of this coverage for an admittedly poor-risk group, it remains to be seen how much protection can actually be offered for a fixed premium of \$6 per person per month.

Strange as it may seem, however, the fact that there are no contracts-in-being has not deterred the government from starting to enroll the elderly. As of September 1, the Social Security Administration began mailing out "sign-up" cards to nearly 15 million persons age 65 and older, accompanied by a notice that if they do not enroll in the program within a specified period they will have to pay higher premiums or may even be barred from enrollment forever. In some quarters it is felt that such premature solicitation under such promotional pressure has placed the aging in the position of buying sort of a pig-in-a-poke now—or else.

From the practitioner's standpoint, the form these contracts will finally take is

equally nebulous at this time. Suffice it to say that, whatever carrier or carriers may be selected to act as fiscal agents, the principal authority for administration will rest with the Secretary of HEW in at least two important areas: (a) ruling on the "medical necessity" of any services for which a claim for payment is made, and (b) ruling on the amount of payment that can be made for a service on the basis of *his* determination of "reasonable cost or charge." Some discretion in these matters may be left to the fiscal agents, but the language of the Law suggests that the Secretary will keep his eye on disbursements, through frequent and critical review, and will undoubtedly call a prompt halt to the operation of any plan that is paying providers of services at rates higher than those *he* considers "reasonable." It is being predicted by some that the contracts may end up as "hybrids," embodying selected features of Blue Shield, private insurance, Dependents' Medicare, welfare programs and other existing third party payment plans. It can only be hoped that the best features of these plans will be embodied, and that their less desirable features will be excluded.

During its some twenty years of opposition to any but the most limited "social insurance" for health services, the profession has not stressed the economic implications of such a proposal. In other words, protection of the "doctor's pocketbook" has never been advanced by its spokesmen as a reason for keeping medical practice free of government control. With the passage of Medicare, however, the practitioner must face the total picture of Federal intervention—not excepting its potential impact on his right to charge "usual and customary" fees for his services.

Individually and collectively, most physicians have always adhered to the principle of "service benefits" when dealing with patients in modest or reduced circumstances. In earlier times, each doctor tailored his fees to suit each patient's resources—even waiving his fee entirely when circumstances warranted. More recently, the same principle has been extensively promulgated on a group basis through voluntary participation in an ever-increasing number of "substandard payment" programs, both public and

private; i.e., Old Age Assistance and others for the indigent, Medical Assistance for the Aged and others for the semi-indigent, and Blue Shield and others for the so-called low income segments of the population. In all such programs, the "service benefits" principle has been applied to accommodate the patient's presumed inability to pay a "usual and customary" fee, whether that inability was felt to be total or only relative.

The Medicare Law has introduced an entirely new factor into the service benefits equation. A group of approximately 20 million Americans has been declared by Congress to be eligible to receive health services at special rates ("reasonable costs or charges") and under special conditions (at taxpayers' expense) *solely* on the basis that they have reached or passed their sixty-fifth birthday. This latest concept of entitlement to service benefits (although the Law omits use of that term) is not just novel—it is a revolutionary "first" in the field of medical economics, and should be recognized as such by every practitioner of medicine.

Whether dealing with Medicare patients or with patients in general, it is doubtful that many doctors would wish to depart from the traditional practice of curtailing or even waiving their fee when, in their judgment, circumstances seem to warrant such action. Conversely, however, it is equally doubtful that any significant number of physicians really feel it is incumbent upon them to so adjust their normal charges when the patient's ability to pay is *not* in question—but only his age or some other not necessarily relevant factors. Yet, from published reports, it appears likely indeed that this is exactly what government planners hope to bring about under Part 1-B contracts.

Some of Medicare's principal architects are insisting that in order to make the deductible (\$50) and co-insurance (20 per cent) features of the program "meaningful" to enrollees, it will be necessary for HEW to seek to place a limit on the maximum liability of the government to pay its 80 per cent of the "reasonable costs and charges" made by providers for rendering the covered services. The American Medical Association's plea that this liability be measured on "usual and customary" charges was

turned down by Congress, and it will therefore be surprising if most payment schedules promulgated for Part 1-B contracts are not of the fixed variety.

Fixed payment schedules are practically synonymous with "service benefits," and if HEW carries out its reported present thinking the plan might produce results such as the following: A physician's "usual and customary" fee for a service is \$100, but HEW's estimate of 80 per cent of a "reasonable charge" for the service in that area turns out to be only \$60. As a consequence, the patient will be liable for (but not necessarily disposed to pay) twice his supposed contractual 20 per cent of the doctor's bill; i.e., \$40 instead of \$20. When asked about this possibility recently, HEW Undersecretary Wilbur J. Cohen suggested that the disparity was something that would "probably have to be worked out by the patient and the physician, presuming that the patient was willing to pay the difference."

Many experts are suggesting that the determination of "reasonable costs and charges" in the different states and their subdivisions be made by HEW on the basis of some prevailing schedule in each area, such as that of the local Blue Shield plan. Thus, by taking 80 per cent of the Blue Shield payments listed in the existing local schedule, the government's co-insurance liability can be derived for that area with a minimum of effort.

In attempting to assess the logic of this approach, and the probable consequences of its use, one can only fall back on experience. The keystone of most Blue Shield schedules is that the payments be substandard so that the low-income subscriber can purchase the contract at the smallest possible cost. It is well known that in different sections of an area served by a Blue Shield plan, there may be marked differences of opinion among practitioners as to what realistic relationship exists between these substandard payments and normal charges. In one section, the payments may be looked upon as full fee-equivalents. In another section, the payments may be evaluated at 50 per cent or less of usual and customary fees for many services. Hence, it seems quite unlikely that the approach to Part 1-B contract development said to be currently under considera-

tion by HEW will produce a program which is more than one cut, if any, above the type common to most public assistance (welfare) plans.

Pending revelation of the ultimate interpretation given by HEW to the provisions of Part 1-B, it appears that the physician will be granted the legal right to continue to assess his charges on a usual and customary basis for Medicare cases, unless he elects to do otherwise through the medium of accepting "assignment of benefits" from the patient. As presently understood, if the doctor wishes to be assured of this "cash-on-the-barrelhead" type of payment for Medicare work he can obtain such assurance *provided* he agrees, in writing, to accept the scheduled payment as "in full" and waives his right to collect from the patient the 20 per cent co-insurance balance for which the latter would ordinarily be liable.

On the other hand, if he so chooses, the Law also appears to grant him the right to bill his patient for the fee they have mutually agreed upon, thereby allowing the patient, rather than himself, to be reimbursed *directly* by the government or its fiscal agent. Such a practice is followed at the present time in many parts of the country, a practice which has its foundation in the concept of INDIVIDUAL RESPONSIBILITY in the patient-physician relationships. The purpose of IR is to keep separate and distinct the agreements which are entered into voluntarily by (1) the patient and the physician and (2) by the patient and an insuring agency, whether private or public. In this way, the obligations of all concerned are kept on a two-party basis, and the patient does not become confused by the intervention of a third party in either of these quite different agreements.

What choice the practitioner will make in this matter will probably depend on many considerations. When the Part 1-B contracts finally become available for examination, he will certainly be interested to learn what the specific terms of the contracts are and what options, if any, may be offered him. But, above all, he should keep firmly in mind that the choice is his alone—certainly not that of the government or his medical societies—and that he is free to choose on the basis of what he determines

to be most appropriate to his patient's needs and circumstances, and most conducive to his rendering a high quality of medical care to those he serves.

#### V. Title XIX of Part 2—The Expanded Programs of Public Assistance

Part 2 of P.L. 89-97 creates a new Title XIX for the broad general purpose of expanding and supplementing all existing programs of public assistance for health services which are financed on a shared basis by the Federal government and participating states, and of furnishing tax-supported coverage for several new programs in the fields of tuberculosis, mental disease and rehabilitation.

The scope of this legislation is so vast, and the details of its proposed *modus operandi* so complex, that it is clearly beyond the competence of any but bureaucratic experts to interpret their immediate and long-range significance.

In effect, it appears that Title XIX will permit states to combine all public assistance medical programs under one gigantic umbrella until December 31, 1969, and, thereafter, make it *mandatory* for them to do so if they wish to continue to qualify to receive Federal funds. Hence, it seems likely that the trend will be to put on a uniform footing such diverse existing programs as Old Age Assistance, MAA (Kerr-Mills), Aid to Dependent Children, Aid to the Blind, Aid to the Disabled and sundry others.

The full impact of this combining and homogenizing of programs will probably not be felt for several years to come, nor will the precise terms on which physicians will be invited to participate be known. Unless history is reversed, however, it may be anticipated that the so-called "new" arrangements will have a distinct welfare-type orientation about them, and retain most of the old features with which most doctors have become so familiar; i.e., sub-standard payments for all providers of services, cost and utilization controls, regulations by directive, endless forms and certificates to be completed, and so forth.

The Society takes no position on, and makes no predictions about, how well or how poorly this blanket approach will meet

the medical needs of the people concerned. Based on the past advisements of its members on welfare matters, however, it may be best for everyone to await the implementation of Title XIX with the time-honored adage in mind that "he who expecteth nothing shall not be disappointed."

#### VI. Summary

In the preparation of this assessment of the professional implications of P.L. 89-97, every effort has been made to keep the presentation both factual and objective. It would not be quite truthful, however, to claim that it is intended merely to inform. It is also intended to stimulate serious thinking about a matter of major importance. The leadership of the Connecticut State Medical Society feels strongly that continued freedom of the physician to make medical decisions on a strictly medical basis is an ideal worth preserving and not one to be relinquished by default. As stated in the preface to this document, the leadership believes that the proven guiding principles which have carried American medicine to its present high level of achievement must not be abandoned or even seriously compromised as a consequence of Medicare's enactment in 1965. To advance this purpose, and to act responsibly toward the public, it cannot recommend that practitioners willingly submit to domination by government, if such should ever be attempted, or willingly allow Federal regulation of other providers of health services to bring about deterioration in the quality of medical care received by patients for whom they are legally and morally responsible to do their very best.

Just as Section 1801 of the Law disclaims Federal authority or intent to interfere with the practice of medicine or the manner in which medical services are provided, just so does the governing body of the Society disclaim authority or intent to prescribe any single approved course of conduct for physicians operating in the new climate of Medicare or one which differs in the slightest degree from the course that physicians have developed for themselves over the centuries, through a voluntary process of individual and collective self-discipline.

In his office, by the bedside, and at the

operating table, each privately practicing doctor is the master of his own ship. He willingly subjects the quality of his work to evaluation by a jury of his peers, but his peers are not in any way privileged to control his mind or dictate to his conscience. To do what is best for the patient is the common goal, but the approaches to that objective are not necessarily all of a kind. Hence, since the various facets of the Medicare Law will undoubtedly be viewed differently by different physicians, it is clear that each one must decide for himself to what extent he will elect to become directly involved in these basically two-party contracts between the Federal government and the elderly. This is his right, but it is also his responsibility, and for him to procrastinate in making this important decision—*after* he has studied the terms of involvement—may well contribute to his own disadvantage and to that of his patients.

Before President Johnson put extreme pressure on Congress, and the enactment of Medicare began to appear certain, the profession did not stand alone at the bar of legislative justice. Many were those from other health fields who stood at its side, year after year, sharing the trying task of attempting to convince legislators that medicine and politics should not be mixed on any but a very limited scale. For the most part, the arguments of the others were also our arguments; in the main, their warnings of the dangers of Federal interference in patient care were the same as our own.

But when political prognosticators began to assess Medicare's passage as imminent, a strange metamorphosis appeared to take place among quite a few—in fact, most—of our former comrades in arms. There is no useful purpose to be served in pointing a finger at any particular group or groups of these previous opponents of P.L. 89-97 and its predecessors, or in suggesting that their changing of position was in any way improper, but the fact is that when they thought they saw the writing on the wall, they rushed before the committees of Congress to protect their vested interests. In gambling parlance, they pleaded to be given "a piece of the action." They were being

realistic, they said; it was foolhardy to make further effort in a losing cause.

In the mad dash in quest of real or imagined economic salvation which took place, only organized medicine remained aloof and stuck to its guns to the bitter end. Some members have been critical of this last-ditch stand, and it must be confessed that the profession's intransigence was unsuccessful in saving the day. But it may be said with a small measure of warranted pride that the AMA's steadfastness has not gone entirely unrewarded. To be sure, it gained nothing for itself, but it may have salvaged something of value for every private practitioner.

As the Law was finally enacted, *all* providers of health services will be allowed to participate in the Medicare program, but *only* physicians may do so without having to become legal parties to any of its contracts. The others, including insurance carriers, will have to sign binding agreements with the Secretary of HEW to be permitted to furnish services to the elderly, and to "negotiate" the terms of their reimbursement and other conditions of participation with him. Hence, the doctor is the sole provider of services who may choose to confine his allegiance and responsibility to the patient, unless he elects to do otherwise, since Section 1801 of the Law clearly prohibits interference in medical practice by the Federal government, its officers, or its employees. This legally-defined freedom may prove to be a real "plus" to the privately practicing M.D.

While some may argue to the contrary, it appears that the autonomy now enjoyed by the directors of local hospitals and related facilities, local insurance carriers and pre-payment plans, and other local voluntary health agencies is almost sure to be usurped in some degree by HEW, through the contractual arrangements which must be made. It can only be hoped that the degree of such usurpation will never become so great that these local providers are hampered in their efforts to maintain and constantly improve the quality of patient care in thousands of separate communities all across the country. American medicine has long contended that Federal control on a massive scale would bring about deterioration in the

quality of health services. It remains to be seen whether this danger can be avoided, now that Federal control is coming to pass.

As has been stressed throughout this presentation, if the Medicare Law is implemented entirely within the meaning of Section 1801, it may prove possible for most physicians to elect to become involved in its programs without significant reservation. If, on the other hand, the government should give P.L. 89-97 a strict, narrow interpretation, imposing rule upon rule to control its costs, it may be that some practitioners will feel driven to exercise the only recourse presently known; i.e., to decline to accept Medicare cases. The Legal Department of the AMA has suggested, in fact, that this may prove to be the only way to be sure of completely avoiding all potential difficulties with the Law. Such a "negative" action would be ethical, of course, since the *AMA Principles* (Section 5) state: "A physician may choose (except in an emergency) whom he will serve."

But that such an all-or-none choice would sit well with a practitioner's conscience—or sit with it at all—is extremely doubtful, at least for most. For decades, American farmers have been made to suffer sharp twinges of conscience as a result of Federal agricultural policy—the policy of *not* growing things or of plowing under the fruits of their labor. Without question, a great many doctors would be similarly disturbed if they were forced, by the stringencies of a law, to *not* practice medicine and to *not* be true disciples of Hippocrates.

Yet it cannot be denied that among the nation's practitioners today there is apprehension that this might come about, or that there still remains a burning desire to keep medical judgments free of bureaucratic control. The somewhat hard-to-define concept of "non-participation" has gained considerable support in some quarters, but has aroused considerable antagonism in others. When the proponents of this concept debate with its opponents, however, it is evident to the listener that their purpose is exactly the same; that it is only the term "non-participation" about which they differ.

Perhaps "non-control" could be considered more descriptive of what is *really* being sought by almost all members of the

profession, since, even when discussions are heated and uninhibited, one hears no talk at all of turning away Medicare patients, or of acting in any way which might tend to deprive them of entitlement to any benefits the government has promised to deliver. The talk is only about control, and the deep-seated fear thereof.

Quite a number of medical experts agree that the primary purpose and primary effect of Medicare regulations will be to limit the costs of the programs; *not* to raise the standards of patient care for the elderly. With considerable justification, they point out that this purpose is common to most government programs which profess to seek social betterment—especially at the Federal level. For some strange reason, they say, it always seems to turn out that while it is entirely prudent to spend tax dollars in profligate abundance to create and expand the bureaucracy which will administer each new program, it is frowned upon as highly imprudent to allow more than a trickle of tax funds to emerge at the far end of the cornucopia—the place where the promised benefits of the program are supposed to be delivered to the people. Hence, just to help the elderly to establish their eligibility for health services under Medicare—not to improve their health one iota, the Social Security Division of HEW is opening 71 new branch offices and 21 "temporary" centers all across the nation, which will supplement the efforts of over 600 district offices already in existence. It is useless to speculate how many additional employees will have to be hired to man these stations, or what the administrative costs will be, but it may cause physicians to smile wryly to learn that the objective of this bureaucratic expansion is to assure "the same *high quality* of direct service to the public that has been given over the past thirty years." Comparisons are sometimes odious, but the realist may find food for thought in contrasting this latest venture of the Social Security Administration with a far more modest plan to increase payments to hospitals for the care of welfare patients, recently authorized by the State of Massachusetts. According to an HEW news release, the former action is noble in its purpose because "high quality" of service is involved. In the latter

instance, however, the increase in rates was challenged by prominent Bay State politicians on the grounds that it constituted "robbing from the public till" and "spending . . . the taxpayers' money illegally."

The stated objective of this assessment was to reaffirm and redefine for members of the Society the principles of medical ethics which have guided physicians so well in the past, and to relate those principles to the known professional implications of the new Medicare Law. It is hoped that this mission has been accomplished in a reasonably meaningful way, although it may be years before the total story of Medicare can be written.

Emphasis has been placed throughout on the fact that each physician must arrive at decisions concerning all aspects of this omnibus legislation *independently; not in formal concert with his colleagues or his medical organizations.* P.L. 89-97 is a law, and its legal implications may prove to be of even greater moment than its professional ones. Vast administrative powers have been given to the Secretary of Health, Education and Welfare, and his authority appears to be almost unlimited. It is possible that some of this power and authority will be transferred to those who act as his fiscal agents and to providers of health services who enter into contracts with him. Thus, it could turn out that the physician, who normally heads up the medical team in the care of the patient, might find himself near the foot of the ladder when matters of regulation are given legal interpretation.

In the past, the Society and its component county associations have tried to protect the proper interests of both the physician and the patient when professional conduct has been placed in question. It is the firm intention of the Society to continue to provide this important service and, by so doing, to preserve the status of the patient-physician relationship and promote the highest quality of medical care for the people of Connecticut. Section 1801 of the Medicare Law appears to assure that medical discipline will remain in professional hands as an integral part of the "manner in which medical services are provided" by the physician.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966

#### State

- |             |   |
|-------------|---|
| Feb. 27     | State and County Society Officers Conference of the Tennessee Medical Association, Hermitage Hotel, Nashville |
| April 17-19 | Tennessee Medical Association Annual Meeting, Civic Center Auditorium, Gatlinburg                             |

#### Regional

- |                |  |
|----------------|--|
| Feb. 9-10      | Mid-South Postgraduate Medical Assembly, Memphis, Tennessee  |
| Feb. 28-Mar. 3 | Southeastern Surgical Congress, Marriott Motor Hotel, Atlanta  |
| March 3-5      | Central Surgical Association, Chicago  |
| March 29-30    | Southwestern Pediatric Society, Statler Hilton Hotel, Los Angeles  |
| April 13-16    | West Virginia Academy of Ophthalmology and Otolaryngology, Annual Meeting, Greenbrier Hotel, White Sulphur Springs, West Va. |
| April 18-21    | Southwestern Surgical Congress, Flamingo Hotel, Las Vegas  |

#### National

- |             |  |
|-------------|--|
| Feb. 2-6    | American College of Cardiology, Conrad Hilton Hotel, Chicago   |
| Feb. 3-9    | Congress on Medical Education, Palmer House, Chicago   |
| Feb. 8-12   | American College of Radiology (members only), Drake Hotel, Chicago   |
| Feb. 19-23  | American Academy of Allergy (22nd Annual Meeting), Americana Hotel, New York   |
| March 2-4   | AMA Air Pollution Medical Research Conference, Ambassador Hotel, Los Angeles.  |
| March 4-9   | American Association of Pathologists and Bacteriologists, Statler-Hilton, Cleveland  |
| March 14-17 | American College of Surgeons (sectional meeting for doctors and graduate nurses), Sheraton-Cleveland and Statler Hotels, Cleveland |
| March 23-25 | American Surgical Association, Boca Raton Hotel, Boca Raton, Fla.  |
| April 14-19 | American Dermatological Association (members only), Homestead Hotel, Hot Springs, Va.  |
| April 15-17 | American Society of Internal Medicine, Biltmore Hotel, New York  |
| April 18-19 | American Otological Society, Americana Hotel, San Juan, PR.  |

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**Contraindications:** Benactyzine hydrochloride is contraindicated in glaucoma. Previous allergic or idiosyncratic reactions to meprobamate contraindicate subsequent use.

**Precautions:** *Meprobamate*—Careful supervision of dose and amounts prescribed is advised. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after use for weeks or months at excessive dosage. Abrupt withdrawal may precipitate recurrence of pre-existing symptoms, or withdrawal reactions including, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, the dose should be reduced and operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may possibly be increased by meprobamate. Grand mal seizures may be precipitated in persons suffering from both grand and petit mal. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

**Side effects:** Side effects associated with recommended doses of 'Deprol' have been infrequent and usually easily controlled. These have included drowsiness and occasional dizziness, headache, infrequent skin rash, dryness of mouth, gastrointestinal symptoms, paresthesias, rare instances of syncope, and one case each of severe nervousness, loss of power of concentration, and withdrawal reaction (status epilepticus) after sudden discontinuation of excessive dosage.

*Benactyzine hydrochloride*—Benactyzine hydrochloride, particularly in high dosage, may produce dizziness, thought-blocking, a sense of depersonalization, aggravation of anxiety or disturbance of sleep patterns, and a subjective feeling of muscle relaxation, as well as anticholinergic effects such as blurred vision, dryness of mouth, or failure of visual accommodation. Other reported side effects have included gastric distress, allergic response, ataxia, and euphoria.

*Meprobamate*—Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstated. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

**Dosage:** Usual starting dose, one tablet three or four times daily. May be increased gradually to six tablets daily and gradually reduced to maintenance levels upon establishment of relief. Doses above six tablets daily are not recommended even though higher doses have been used by some clinicians to control depression and in chronic psychotic patients.

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April 18-22	American College of Physicians, Hilton and Americana Hotels, New York	Medicine, St. Louis—"Ulcerative Colitis" and "Diagnosis and Management of Diarrheal States."
April 23-24	American Laryngological Association, Americana Hotel, San Juan, P.R.	Dudley P. Jackson, M.D., Associate Professor of Medicine, Johns Hopkins Hospital, Baltimore—"Fibrinogen Deficiency States" and "The Blood Platelet As A Living Cell."
April 25-29	American College of Allergists, Palmer House, Chicago	Arthur Strauss, M.D., Head, Autoimmunity Section Laboratory of Immunology National Institute of Allergy and Infectious Diseases, Bethesda, Md.—"The Thymus: Newer Concepts As to Function and Relation to Disease Processes in Man" and "Myasthenia Gravis: Immunological Aspects."
April 25-30	American Academy of Neurology, Bellevue-Stratford Hotel, Philadelphia	Irving S. Cooper, M.D., Director of the Department of Neurologic Surgery, St. Barnabas Hospital, New York—"Neurosurgical Treatment of Involuntary Movement Disorders" and "Cryogenic Surgery: The Use of Extreme Cold As a Surgical Tool."
April 27-29	American Pediatric Society, Inc., Seaside Hotel & Steel Pier, Atlantic City, N. J.	John D. Thompson, M.D., Professor and Chairman, Dept. of Gynecology and Obstetrics, Emory University, Atlanta—"Factors Associated with Premature Birth" and "Intrapartum Fetal Distress."
April 27-30	American Association of Plastic Surgeons, Sheraton-Cleveland, Cleveland	Langdon Parsons, M.D., Clinical Professor of Gynecology, Harvard Medical School, Boston—"Conservative Management of Endometriosis" and "Evaluation of Present Day Management of Endometrical Cancer."
May 1-5	American College of Obstetricians and Gynecologists, Palmer House, Chicago	Sam Banks, M.D., Associate Professor, Orthopaedic Surgery, Northwestern University Medical School, Chicago—"Fractures of the Growth Zones in Children" and "Injuries of the Ankle."
May 7-8	American Academy of General Practice—State Officers Conference, Muehlebach Hotel, Kansas City	Richard L. Day, M.D., Director of Medical Dept. of Planned Parenthood, World Population, New York—"Temperature Regulation and the Survival of Premature Infants" and "Recent Advances in Family Planning—Developed and Developing Nations."
May 9-13	American Psychiatric Association, The Traymore, Atlantic City, N.J.	Harry Medovy, M.D., Professor and Head of Dept. of Pediatrics, University of Manitoba, Winnipeg, Canada—"Anticipatory Diagnosis in Infancy and Childhood" and "Clinical Recognition of Abnormal Chromosomal Syndromes."
May 22-25	American Thoracic Society, Hilton Hotel, San Francisco	Harold O. Peterson, M.D., Professor and Head, Dept. of Radiology, University of Minnesota—"Myelography and Discography in the Diagnosis of Lumbar Intervertebral Disc Disease" and "Roentgen Findings Before and After Gastric Freezing for Peptic Ulcer."
May 22-26	American Orthopaedic Association, Broadmoor Hotel, Colorado Springs, Colo.	William E. Adams, M.D., Professor of Surgery, University of Chicago—"Some Pertinent Factors in the Improvement of Surgery for Carcinoma of the Lung" and "The Place for Surgery in the Treatment of Hiatus Hernia of the Esophagus."
May 26-28	American Gastroenterological Association, Drake Hotel, Chicago	Robert J. Prentiss, M.D., Associate Clinical Professor of Surgery—Urology, University of California School of Medicine, San Diego—"Diagnosis and Management of the Urologic Patient in General Practice" and "Surgical Anatomy and Treatment of the Undescended Testicle."
May 30—June 1	American Ophthalmological Society (members only), The Greenbrier, White Sulphur Springs, West Va.	Capt. George F. Bond, Medical Corps, U. S. Navy, Special Projects Office, Washington, D. C.—
May 30—June 2	American Urological Association, Palmer House, Chicago	

### Mid-South Postgraduate Medical Assembly

The 77th Annual Meeting of the Mid-South Postgraduate Medical Assembly will be held at the Hotel Peabody in Memphis, February 9-11. The following program, presented by the Mid-South Assembly in cooperation with the University of Tennessee Department of Continuing Medical Education, will be acceptable for credit.

Marshall K. Bartlett, M.D., Clinical Professor of Surgery, Harvard Medical School, Boston—"The Choice for Duodenal Ulcer" and "The Treatment of Recurrent Pancreatitis."

R. Kennedy Gilchrist, M.D., Clinical Professor of Surgery, University of Illinois College of Medicine, Chicago—"Indications for Oophorectomy with Colonic Surgery" and "Troublesome Minor Rectal Surgical Problems."

Malcolm L. Peterson, M.D., Assistant Professor of Medicine, Washington University School of

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50/150	70.02	87.22	168.30	251.84
75/225	74.10	92.30	178.10	266.50
100/300	76.32	95.07	183.44	274.50
200/300	79.66	99.22	191.46	286.49
300/300	81.88	101.99	196.80	294.48
200/500	88.77	108.61	202.13	298.49
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Col. Earl W. Brannon, Keesler Air Force Base, Mississippi—"Medical Aspects of Manned Space Flight" and "Physical Conditioning in the Air Force Today."

The annual banquet will be held on Thursday Evening, February 10th. Tickets should be obtained early through the Office of the Memphis and Shelby County Medical Society, 774 Adams Avenue, Memphis.

### The Atlanta Graduate Assembly

The 1966 Atlanta Graduate Medical Assembly, sponsored by the Fulton County Medical Society, will be held at the Marriott Hotel, February 7-9. The Assembly, in cooperation with the Georgia Chapter of the American Academy of General Practice, will be acceptable for credit. A.G.M.A. will offer a faculty of 18 outstanding speakers and has worked closely with representatives of specialty groups to present a program on Medicine, Surgery, Cardiology, Obstetrics and Gynecology, Orthopedics, and Pediatrics. Additional information may be obtained from: Fulton County Medical Society, 875 W. Peachtree Street, N. E., Atlanta, Georgia, 30309.

### New Orleans Graduate Medical Assembly

The 29th annual New Orleans Graduate Medical Assembly will be held March 7-10, with headquarters at the Roosevelt Hotel. The registration fee of \$25 includes lectures, medical motion pictures, symposia, clinicopathologic conferences, technical exhibits, three round-table luncheons, planned entertainment for visiting ladies and oth-

er features. The program is acceptable for twenty-nine accredited hours by the American Academy of General Practice. Requests for reservations should be addressed to Greater New Orleans Tourist and Convention Commission, 400 Royal Street, Suite 203, New Orleans, La. 70130. For additional information, write: F. H. Harris, M.D., Secretary of the Assembly, 1430 Tulane Avenue, New Orleans 70112.

### William Osler Medal Student Essay Contest

The William Osler Medal of the American Association for the History of Medicine is awarded for the best unpublished essay on a medico-historical subject written by a student in one of the medical schools in the United States or Canada. All students who are candidates for the degree of Doctor of Medicine, or who graduated in 1965, are eligible. This medal, first awarded in 1942, commemorates the great physician, Sir. William Osler, who stimulated an interest in the humanities among students and physicians alike.

Essays should demonstrate either original research or an unusual appreciation and understanding of a medicohistorical problem. Maximum length is 10,000 words. The prize-winning essay will be submitted to the Editorial Committee of the Association, which may recommend it for publication in the *Bulletin of the History of Medicine*.

Essays must be submitted by March 23, 1966, to the Chairman of the Osler Medal Committee, William K. Beatty, Librarian and Professor of Medical Bibliography, Northwestern University Medical School, 303 East Chicago Avenue, Chicago, Illinois 60611.

## MEDICAL DIGEST

(Continued from page 74)

"triumvirate of forces" has "enormous potential for drastically altering the pattern of medical education, research and service". He also urged the medical profession to be prepared to seize the initiative and keep it on the vital issues of medical education, rising health care costs, quality controls, ethics and discipline, and strengthening the medical federation at the state and local levels.

- A \$25 a year increase in membership dues, effective in January 1967, was recommended by the House. Final action will be taken at the annual meeting in June, 1966.
- Dr. James Z. Appel described medicine's efforts "to guide in the best possible direction the actions that government agencies are now taking to activate existing law (P.L. 89-97). He reviewed the activities and responsibilities of the AMA's six technical advisory committees under the Medicare Law.

The final registration figures reached a total of 9,423 including 4,619 physicians in attendance.

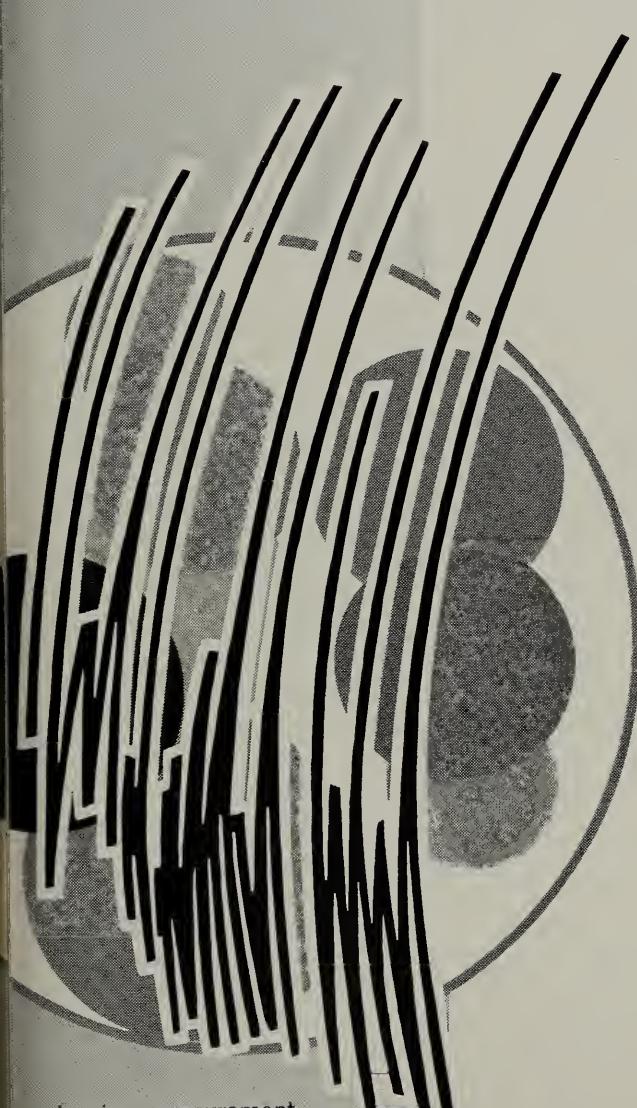
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## Instructions to Contributors

Manuscripts submitted for consideration for publication in the *JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION* should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville 12, Tennessee.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, *J. Tennessee M. A.*, 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

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R. H. KAMPMEIER, M.D., Editor

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# Journal of the Tennessee Medical Association

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VOLUME 59

FEBRUARY, 1966

No. 2

The private practitioner of medicine holds the key to the success or failure of the current attack upon syphilis. If venereal diseases are preventable, they are by the same token controllable. Control, however, depends upon early treatment in the infectious stage. The mildness of symptoms, disease of the genitalia, and fear conspire to delay or to avoid medical attention, yet permit the infection of others. The only answer to control is to uncover such sources of infection. Quite obviously, if the private practitioner treats the majority of those infected by the venereal diseases and does not report them to the health department, the chances of drying up the pool of infection in the community is nil. This epidemiologic study in Nashville emphasizes how the reporting of one case by a private practitioner led to the treatment of many persons.

## Syphilis Control: Joint Responsibility of Private Medicine and Public Health\*

THOMAS J. FRIDDELL, M.D., and ROBERT E. FLYE, B.S.,† Nashville, Tenn.

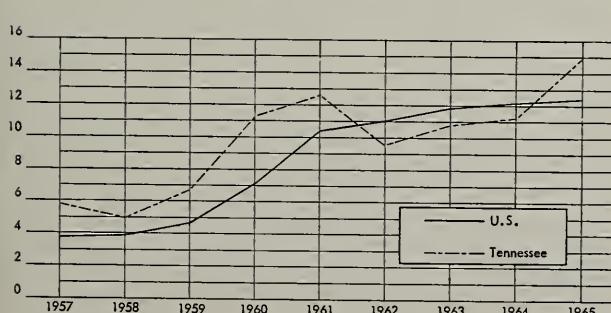
The reported incidence for primary and secondary syphilis in Tennessee paralleled the increasing national incidence but at a rate one and one-half times the national rate from 1958 through 1961. In 1962, Tennessee experienced a slight decline in the reported incidence rate of infectious syphilis for the first time since 1957. However, since 1962 the national rate has leveled off while Tennessee recorded a marked increase in 1965. (Fig. 1.) Of Tennessee's re-

corded cases in 1965, one-third were reported by private physicians. A national survey by the American Medical Association in cooperation with the American Social Health Association in 1962 indicated that only one of every six cases of syphilis diagnosed in private practices were reported to the State Health Department in Tennessee.<sup>1</sup>

The role of private medicine in syphilis control has been repeatedly emphasized in many professional meetings and through a wide variety of informational media.<sup>2,3</sup> In defining the responsibility of the private physician, Kampmeier<sup>4</sup> has indicated that physicians must permit trained health department personnel to perform confidential interviews and to determine the possible source and spread contacts for each of their infectious patients. Furthermore, he has pointed out that little control might be anticipated from the diagnosis and treatment of patients without the rapid tracing and examination of their contacts.

In this report, a series of epidemiologically-related cases of infectious syphilis which occurred in Metropolitan Nashville illustrates that private patients with infectious syphilis are not isolated cases but are a part of a continuing chain of infection within the community. (Fig. 2.) The even

Figure 1  
PRIMARY AND SECONDARY SYPHILIS  
Cases per 100,000 Population



\*From the Metropolitan Health Department of Nashville and Davidson County, and the Department of Preventive Medicine, Vanderbilt University School of Medicine, Nashville, Tenn.

†Dr. Friddell is Director, Venereal Disease Control, and Robert E. Flye is a Public Health Advisor, Metropolitan Health Department.

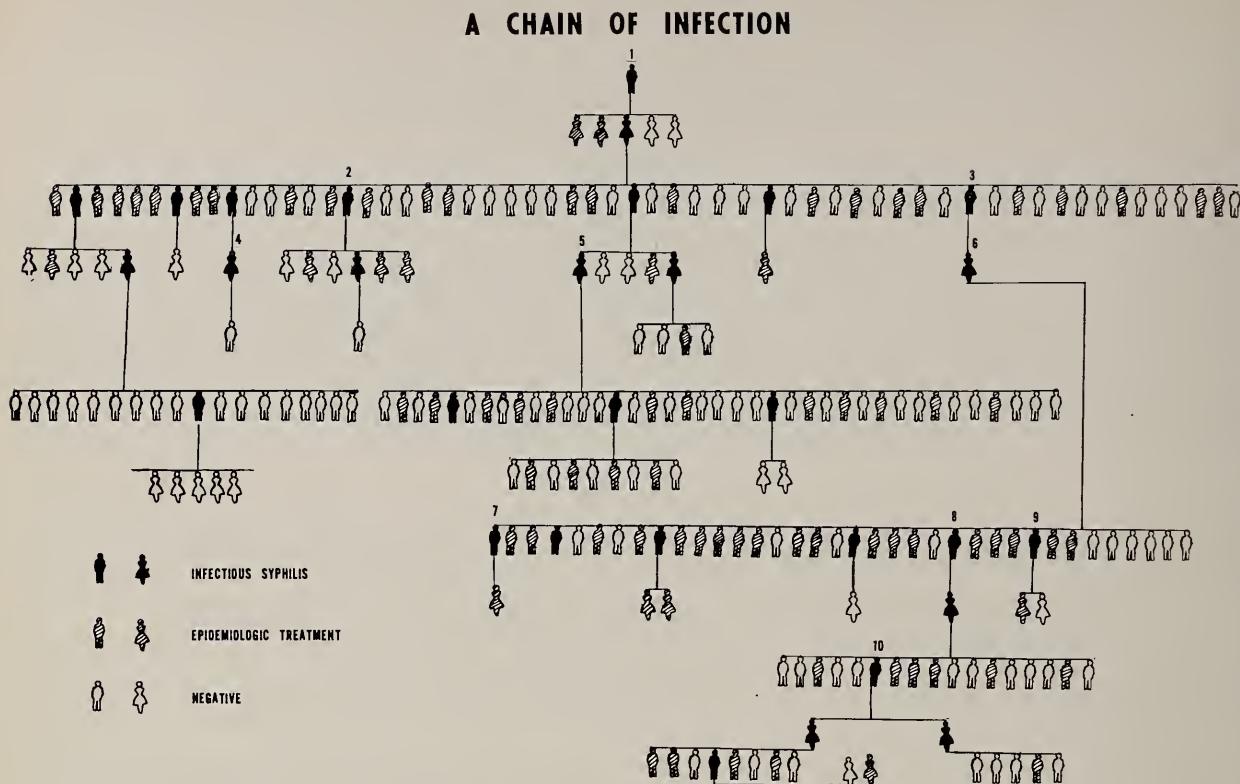


FIG. 2. The numbered cases, 1 through 10 represent patients who were either seen initially by a private practitioner or elected to see one following contact investigation and advice by the V.D. Investigator. The epidemiologic study began with Case 1 reported by a private physician.

tual disclosure of this series of cases was initiated by a private physician when he telephoned the Nashville-Davidson County Health Department to report a 31 year old white man with darkfield-positive primary syphilis. This physician requested that a confidential contact interview be carried out immediately. The reporting of this index case and subsequent epidemiologic exploration led to a sustained chain of infectious syphilis numbering 29 additional cases. From these 30 cases, interviewers obtained 305 named persons as sexual contacts during a maximum period of infectivity as determined by diagnosis and clinical histories of signs and/or symptoms. Eighty-four of the examined contacts, clinically and serologically negative on initial examination, were given prophylactic therapy consisting of a single injection of 2,400,000 units of benzathine penicillin G, when exposures to infectious patients were confirmed by interviewing both patients and contacts. An additional 119 contacts, considered to be outside the limits of the incubation period or who gave histories of allergy or sensitivity were followed serolog-

ically to determine if any subsequent infection developed.

During the interval necessary to establish this chain, a total of 17 private physicians examined contacts. Five physicians indicated that they had treated contacts prophylactically on epidemiologic evidence. Ten of the 30 cases were diagnosed and the patients treated by 8 different physicians. The physicians permitted all 10 patients to be interviewed.

From a detailed study of this chain of infection, a number of interesting epidemiologic facts are revealed:

(1.) All of the patients were Caucasian. Twenty were males and 10 were females. The median age was 34 years for both males and females. The age range was from 18 to 53 years. Only one was a teenager—an 18 year old female. Ten were between 30 and 39 years of age, and 10 were between 40 and 53 years of age. Most of the patients in this infectious chain were middle class. However, the economic level ranged from indigence to a very wealthy person.

Although informational materials repeat-

edly emphasize the continuing rising incidence of syphilis among teenagers and young adults, the age, social and economic factors in this group epidemiologically suggest a balanced appraisal of the whole social environment is essential. From the physician's viewpoint, the syphilis patient absolutely cannot be categorized, which demands a wide range of medical suspicion.

(2.) Eighteen of the 20 males were brought to treatment as named spread contacts to 6 highly promiscuous female patients, some of whom admitted to prostitution. One prostitute appeared to be the possible source of infection to 6 male patients.

Within any related heterosexually active group of persons, the spread phenomenon by females, as is illustrated in this chain of infection, has repeatedly been demonstrated epidemiologically. The reservoir and the responsibility for prolonging chains of infection usually rests with a relatively few, highly promiscuous females. When prostitutes predominantly make up the distaff side of a heterosexual group, the experienced epidemiologist also anticipates that many of the involved individuals will be in the older age brackets. The majority of the male spread contacts were between 34 and 52 years of age.

(3.) Twenty of the 30 persons in the chain were brought to treatment as cases of primary syphilis; 7 persons were diagnosed as having secondary syphilis; and 3 were diagnosed as early latent syphilis.

To successfully curb a chain of infectious syphilis, every patient must be skillfully interviewed, contacts must be rapidly located and referred for examination, and contacts exposed within a period of infectivity, who are clinically and serologically negative, should receive prophylactic therapy. Spread cases identified from the 10 secondary and early latent syphilis cases numbered approximately three times as many as from

the 20 cases with primary syphilis. In epidemiologically combatting an infectious chain, as in this report, it is essential not to permit persons with syphilis to progress through a maximum period of infectiousness. Since 20 of the 30 patients were brought to treatment with a diagnosis of primary syphilis, this appeared to be the major factor in reducing spread and eliminating this chain.

(4.) Medically, when prophylactic therapy is administered to all initially negative contacts of patients with primary syphilis, no spread should occur. A recent chemotherapeutic study indicates that 9.2% of the exposed contacts to primary or secondary syphilis when given a placebo will develop syphilis during the 90-day follow-up period. Sixteen percent of contacts exposed one month or less prior to examination will develop syphilis.<sup>5</sup> Since the majority of the 84 contacts who were given preventive therapy were contacts to patients having primary syphilis, this also seemed to be a significant factor in eliminating this chain of infection.

The teamwork of private medicine and public health as illustrated in this report is repeated daily in all areas of the country. The importance of this cooperative effort cannot be overstated if syphilis is to be controlled and ultimately eradicated.

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1. Curtis, Arthur C.: National Survey of Venereal Disease Treatment, *JAMA* 186: 46, 1963.
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5. Moore, M. Brittain, Jr.: Epidemiologic Treatment of Contacts to Infectious Syphilis, *Pub. Health Rep.* 78: 966, 1963.

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**Side effects:** Side effects associated with recommended doses of 'Deprol' have been infrequent and usually easily controlled. These have included drowsiness and occasional dizziness, headache, infrequent skin rash, dryness of mouth, gastrointestinal symptoms, paresthesias, rare instances of syncope, and one case each of severe nervousness, loss of power of concentration, and withdrawal reaction (status epilepticus) after sudden discontinuation of excessive dosage.

*Benactyzine hydrochloride*—Benactyzine hydrochloride, particularly in high dosage, may produce dizziness, thought-blocking, a sense of depersonalization, aggravation of anxiety or disturbance of sleep patterns, and a subjective feeling of muscle relaxation, as well as anticholinergic effects such as blurred vision, dryness of mouth, or failure of visual accommodation. Other reported side effects have included gastric distress, allergic response, ataxia, and euphoria.

*Meprobamate*—Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstated. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

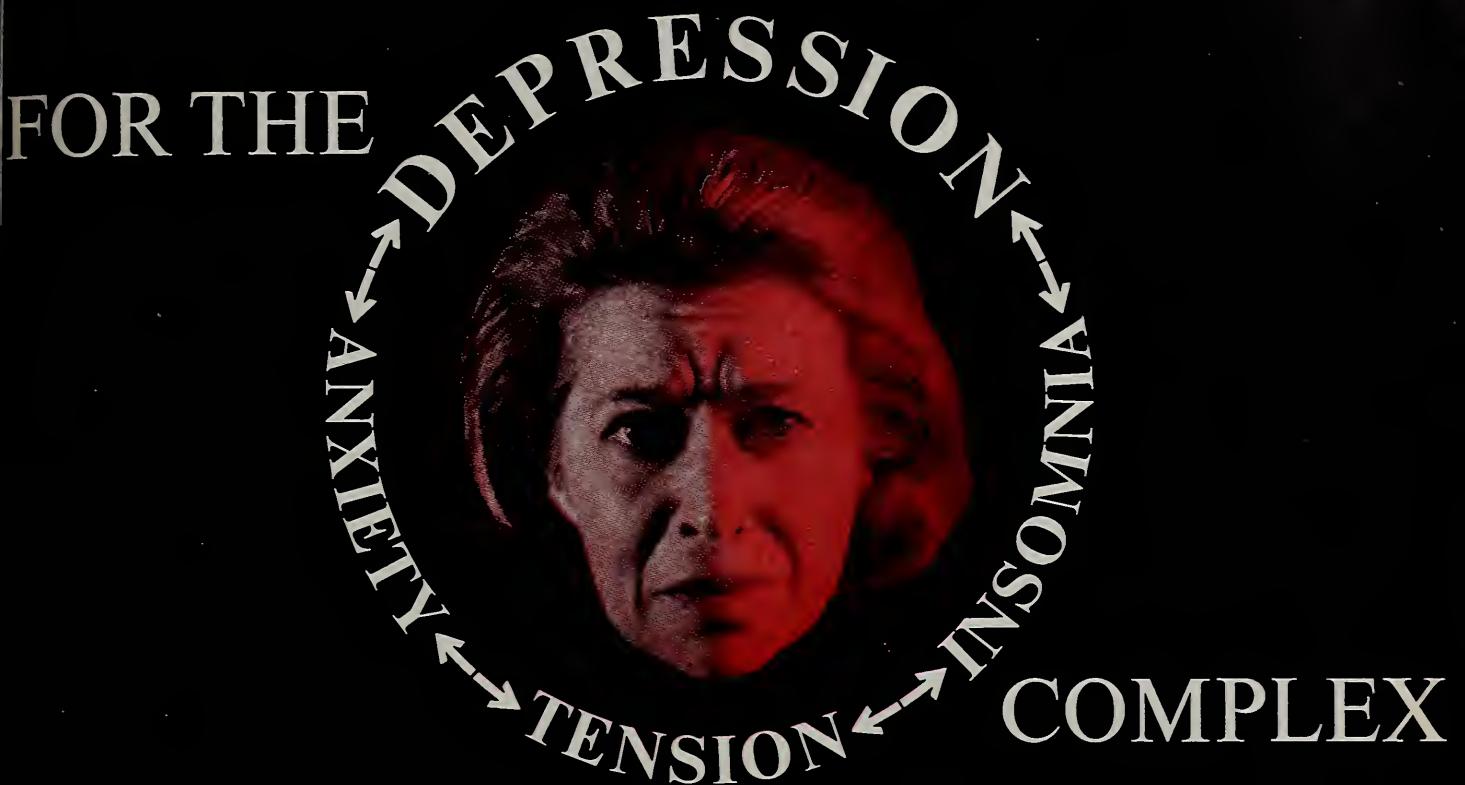
**Dosage:** Usual starting dose, one tablet three or four times daily. May be increased gradually to six tablets daily and gradually reduced to maintenance levels upon establishment of relief. Doses above six tablets daily are not recommended even though higher doses have been used by some clinicians to control depression and in chronic psychotic patients.

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Clinical relapse is a characteristic phenomenon in the natural history of both acquired and prenatal syphilis. It and serorelapse may occur subsequent to treatment and especially so if treatment has been inadequate. This case report is used to point up the hazards of inadequate therapy.

## Clinical Relapse In Early Syphilis: Unusual Skin Lesion Following Inadequate Treatment\*

R. H. KAMPMEIER, M.D., and JAMES E. GOLDSBERRY, M.D.,† Nashville, Tenn.

During the era of arsenotherapy unusual deviations from the common maculopapular eruptions of secondary syphilis were encountered upon occasion. Such lesions occurred as the result of delayed late manifestations of relapse following inadequate treatment or represented transformation from the usual papular eruption to more



FIG. 1. (Courtesy Tr. Clin. & Climatol. A. 57:134, 1941.)

extensive infiltrated lesions while under continuous treatment with arsenic in suboptimal doses. These latter forms were of particular interest, since such transformation usually followed reduced dosage of arsenic because of the not infrequent untoward results of this toxic drug and therefore commonly were thought to represent "arsenic-resistant syphilis." The error of such a concept was proven by the results of using adequate doses of arsenic either as given in the original form or by the exhibition of another form of trivalent arsenic.

Figure 1 represents such an instance. The patient was referred to one of us in 1940 because of "arsenical dermatitis" following treatment with neoarsphenamine in the preceding 2 months. Reactions had been chills, fever, nausea and urticaria. Therefore the dose of the arsenical had been halved. Darkfield examination from the skin lesion above the right eyebrow revealed *T. pallidum* and the use of mapharsen in full dosage led to rapid involution of the lesions.<sup>1</sup>

Figure 2 is of another example. In 1940, a 26 year old woman, because of a genital sore and positive blood tests, was given neoarsphenamine, followed by a chill, temperature of 103.5° and a generalized papular rash. In another city she received 6 weekly injections of neoarsphenamine in one-third the standard dose, followed each time by the same severe systemic reactions. Therefore she was given 22 weekly injections of bismuth and mercury by mouth. In the third week she developed ulcers on the soles, a "fever blister" in the nostril, hoarseness and papules on the forehead and ear. When I saw her first there were deep ulcers of the soles and scaly brown nodules in an annular pattern on the forehead and ear. (Fig. 2.) *T. pallidum* was demonstrated in the latter. Mapharsen produced severe systemic reactions also, only partly controlled by epinephrine. Eventually, old arsphenamine preceded by ephedrine was found to cause the mildest reactions and thereby resolved the lesions with ultimately seronegativity.<sup>1</sup>

Stokes<sup>2</sup> spoke of "precocious tertiarism" believing that inadequate treatment permitted the development of an allergic or hyper-

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FIG. 2. (Courtesy Tr. Clin. & Climatol. A. 57:134, 1941.)

reactive state to the organism or its products, which caused the secondary lesion to partake of some of the characteristics of the tissue reaction of the gumma. Beerman<sup>3</sup> also discussed the problem under "treatment-resistant syphilis" and pointed to the infiltrated plaques and at times psoriasiform aspects of the "precocious secundotertiary" lesion. In reporting 4 such instances in 1941, it was pointed out by Kampmeier<sup>1</sup> that the treponeme was easily identified by darkfield examination, that these lesions were truly those of secondary syphilis, and agreed that they probably represented an altered tissue reaction as the result of the destruction of *T. pallidum* in small numbers continuing to stimulate sensitization of the host to the organism or its products.

Since our treatment by penicillin of the first patient in Tennessee in 1944, we have been expecting or anticipating that someday a patient with this type of lesion might be encountered in one treated with antibiotics. This anticipation was realized in April of 1964. This case is being documented not merely because it represents

probably the first reported instance of the type of manifestation just discussed in one treated by antibiotics, but *more importantly*, from the standpoint of the physician in practice, it emphasizes characteristics of relapse in secondary syphilis and the need for having in mind the varied clinical manifestations which can reflect relapsing early syphilis treated or untreated and, in the case reported, early syphilis inadequately treated. No doubt the course of events described here, except for the unusual skin manifestations, has been repeated hundreds if not thousands of times in the country's population. There is no way of estimating the frequency with which the "routine" use of antibiotics for "colds" and the like, inadvertently and simultaneously undertreats incubating or early syphilis, thereby to modify or alter its natural course.

This patient, a 33 year old white woman, in her 4th month of pregnancy, was first seen in the Metropolitan Health Department on March 30, 1964, having been referred to it because the family physician found a positive VDRL. This was found to be positive to a level of 64 dils. on 3 successive tests, between March 30 and April 10.

The patient was seen on April 17 at Vanderbilt University Hospital, at which time the following comment was made: "A dozen or more flat, deeply infiltrated, brownish-red lesions 2 to 4 cm. in diameter were found mainly on the forearms both anteriorly and posteriorly, on the back of the hand and less clearcut lesions on the legs. In some areas, particularly at the right elbow and on the right forearm, are circular lesions with elevated borders and pigmentation in the center. A horseshoe shaped lesion of a similar type is found on the back of the right forearm. There are some fading lesions on the face." (Fig. 3.)

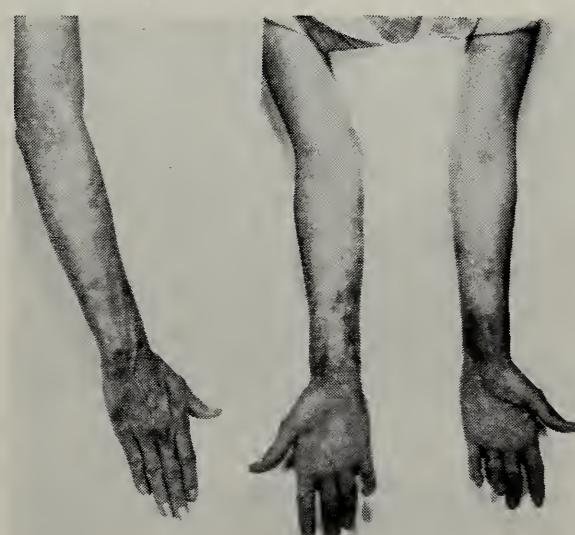


FIG. 3.

The patient had had 2.4 million units of penicillin a week before this time, when examination at the Health Department revealed, in addition to the lesions on the arm, those on the face and legs and body. (These lesions had or were involuting subsequent to treatment when first seen at Vanderbilt University Clinic.)

The patient was a poor historian and obviously of limited mental capacity. However, the following story was reconstructed from answers we received and investigations carried on by the V.D. Investigator for the Health Department, and will be given in chronologic fashion to be followed by epidemiologic evidence.

The patient was known to have negative VDRL tests on April 11, 1960 and July 7, 1961. Sometime "before Christmas", in 1962, the patient recalls having "lumps" on her genitalia and received 500,000 units of penicillin although she was *not examined!* (Their etiology was probably suspected since the doctor had treated her husband—see below.)

In May 1963, the patient said she had "laryngitis" and was given 12 to 16 capsules of Terramycin (125 mg.). Three weeks later she again had "laryngitis" and a "sore throat" and said that she described a "breaking out" to her physician, who did not examine her but prescribed another 12 to 16 capsules of Terramycin. No blood tests were made.

In September or October of 1963 the patient again had a "sore throat" and received one injection of penicillin.

In February of 1964, she became aware of a "rough spot" on the upper arm and had a nodule below the angle of the right mandible on the right side, for which she consulted a physician who gave her some medication to be taken orally.

In mid-March she consulted another physician who, because of the rash, drew blood for testing and found it positive to 64 dils. She was then seen by a dermatologist because of a "butterfly" distribution of facial lesions. L. E. preparations were made and were found to be negative.

The patient was then referred to the Metropolitan Health Department bringing a note which stated, "This is not secondary syphilis!" In the Health Department the positive VDRL tests to the level of 64 dilutions were verified, on March 30, April 6 and 7. Darkfield examination on April 17 was negative, but the patient had received 2.4 million units of penicillin one week previously.

*Epidemiologic findings by the V.D. Investigator.* The husband, a truck driver, was exposed in September of 1962, to an unknown prostitute in Charleston, South Carolina. In November, he had a "blood blister" on the penis and was given one injection (penicillin presumably) by a physician. (In April of 1964 the husband's VDRL test was reported as showing 2 dils. upon 3 occasions. He was treated adequately at the Health Department with penicillin and in May of 1965 the VDRL test was negative.)

*Clinical Course.* The patient received 4 injections of 2.4 million units of penicillin at weekly intervals at the Metropolitan Health Department on April 19, 17, 24, and May 1, 1964. The skin lesions involuted promptly. She was delivered of a normal child. (Her third pregnancy ended at term in December 1965. She remains serofast with a level of 8 dils. at that time. She was thought to need no further treatment during this pregnancy.)

*Comment.* The most significant points to be made about this case are that a man had a penile lesion, was treated with penicillin, but presumably the attending physician disregarded the epidemiologic implications and health of the wife. When some months or more later, she developed vulvar lesions (probably condylomas) she received an injection of penicillin but was not examined. The initial treatment was grossly inadequate and set the stage for the subsequent clinical course. Upon 3 occasions in the next 9 months she probably had a relapse in the form of "laryngitis" and/or "sore throat," and at one time had what was described as a papular eruption. Presumably without the significance of these manifestations being understood, the patient received on two occasions a broad spectrum antibiotic and upon another occasion penicillin in inadequate dosage. Finally, some 14 months after the appearance of her first genital lesions and early in her pregnancy, she developed skin lesions which led to the finding of a positive VDRL test to 64 dils. and led successively to consultation with a dermatologist, investigation for disseminated lupus and referral to the Metropolitan Health Department.

#### Discussion

If the story is correct, it was only a fortuitous circumstance, the skin lesions, which revealed the presence of syphilis. Neglect in reporting the husband's acute disease permitted the development of syphilis in the wife and, if the cutaneous relapse had not occurred, the fetus might have gone on to a stillbirth, or worse been born syphilitic with always the possibility of an incapacitated person in future years and a public charge. The wife of course might have gone on to develop aortic disease or paresis two decades or more later.

The second item of interest in this patient is that this is the first instance we have

seen, and presumably the first reported, of the type of cutaneous disease encountered upon occasion in the days of arsenotherapy. Because of its toxicity inadequate treatment was much more likely than with penicillin, which would explain the presumed rarity of this cutaneous manifestation of acute syphilis in the penicillin era. Now, almost all patients receive full treatment for acute syphilis and with cure, if penicillin is begun for such management.

However, it should be obvious that inadequate treatment of unknown or unrecognized syphilis is not unusually followed by infectious or other relapse lesions whether treatment is by arsenic or penicillin. This became evident to us who took part in the initial program of evaluation of penicillin (1944-47) under the auspices of the Office of Scientific Research and Development.<sup>3</sup> With the quantities and forms of penicillin used in the early experiments in the treatment of acute syphilis, relapses occurred in percentages as high as 10 to 14 per cent. It was only after adequate dosage was established and more effective penicillins were developed that clinical relapses fell to minimal levels. Too, before the doses of penicillin were increased to antisyphilitic levels for the treatment of gonorrhea, it was found that the dose adequate for the gonococcus might mask or abort the primary stage of syphilis and permit the subsequent appearance of only relapse lesions, mucosal, cutaneous, systemic or as iritis,—at times many months after infection.

The patient reported here received at no time adequate amounts of penicillin nor of a broad spectrum antibiotic (which at best is a poor second remedy for syphilis). She was merely treated symptomatically for "infections."

*Clinical relapse* is a phenomenon characteristic of syphilis. In the Oslo Study it occurred in the untreated patients to an incidence of 24% and within the first 5 years of the disease. (Of these 95% had relapsed by the end of the second year.) Multiple relapses in this group were recorded in 22.5%, up to as many as 4 episodes.<sup>5</sup> The problem of relapse is even greater in inadequately treated patients. At one time they accounted for 7% of all infectious patients ad-

mitted to the Vanderbilt University Hospital Clinic.<sup>6</sup> Both in our experience and that of the Cooperative Clinical Group—80 to 85% of infectious relapses occurred within the first two years of infection. Of our 80 patients having mucocutaneous relapse following usually inadequate treatment, 89% had one relapse, 9.6% had two and 1.4 three episodes.<sup>6</sup>

The clinical characteristics of relapse in early syphilis, other than the not uncommon iritis, the occasional acute meningitis, and the rare instances of osteitis or hepatitis, deserve particular mention because of diagnosis. Usually the cutaneous lesions differ markedly from the initial generalized maculopapular eruption. Rather, relapse lesions are characterized by their paucity—one or a few papules only, or a tendency to annular lesions reminiscent of late benign syphilis, or rarely manifestations as in this case report. The condylomas are the same in relapse as in the initial bout. The especial hazards of relapse are the mucous patches of the genitalia, lips or buccal mucosa unrecognized by the patient and their significance not realized by the unknowing doctor; they occurred in 51 of the 80 Vanderbilt cases studied, only 16 of the 51 having cutaneous disease as well. These lesions are highly infectious. (The epidemiologic implications are obvious.)

Our patient in this report had recurrent "sore throat" and/or "laryngitis." The pharyngitis and laryngitis of either the original infection or in an episode of relapse are so characteristic that repeatedly the otolaryngologist at the Vanderbilt "nose and throat clinic" in the heyday of syphilis repeatedly sent patients to *Medical L* with the correct clinical diagnosis of acute syphilis without benefit of a blood test. The lavender color of the mucosa of the soft palate, fauces (pillars and tonsils) and pharynx, with the appearance of edema or "stiffness" with or without mucous patches made the diagnosis. Subjective discomfort is less pain than mechanical difficulty in swallowing. A similar appearance of the larynx, with mobility of the cords and with or without mucous patches (usually of a different distribution than tuberculous lesions), provided the clinical diagnosis.

### Summary

This case report emphasizes the need for epidemiologic investigation, recognition of clinical relapse in the mucous membrane, in early syphilis commonly manifested as "sore throat," and lastly the need of adequate treatment for the cure of syphilis in the infected individual. In addition, this case illustrates an unusual form of cutaneous relapse which may follow inadequate treatment.

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### Pulmonary Artery Banding—Indications and Results in Infants and Children: Goldblatt, Allan.; Bernhard, William F., Nadas, Alexander S., and Gross, Robert E.: Circulation 32:172, 1965.

Banding of the pulmonary artery has been proposed as a therapeutic procedure for patients with large left-to-right shunts and pulmonary artery hypertension not amenable to complete correction. It is theorized that by increasing the resistance of outflow from the right ventricle, and thus lowering the pulmonary artery pressure, the size of the left-to-right shunt would diminish, the high output failure state would improve, and the pulmonary arterioles might be protected from developing progressive intimal changes.

This procedure is particularly applicable in young infants with large left-to-right shunts and intractable congestive heart failure who are too young to be operated upon by means of cardiopulmonary bypass; children with left-to-right shunts and severe obstructive pulmonary artery hypertension in whom the pulmonary vascular changes raise the operative mortality to prohibitive levels; and patients with presently inoperable anatomic

defects, in whom the decrease in pulmonary blood flow by means of banding might improve congestive heart failure.

Sixty-nine patients underwent banding at the Children's Hospital Medical Center, Boston between 1957 and 1964 70% were operated upon since 1962. The patients were divided into two groups: (1) those with left-to-right shunts, pulmonary artery hypertension and no great vessel abnormalities and (2) those with left-to-right shunts, pulmonary hypertension and anomalies of the great vessels.

In Group I consisting of 48 patients there was an overall mortality of 19%, and since 1962, 8%. Group II consisted of 21 patients. The overall mortality was 81%.

The authors conclude that patients fitting into Group I would be greatly benefited by a banding procedure but such an operation in Group II should be reserved as a last resort to prevent death rather than as a maneuver for an infant who fails to improve.

(Abstracted for the Middle Tennessee Heart Association by Eric M. Chazen, M.D., Nashville.)

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10,384	1964	88.5%

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Knowledge of arterial insufficiency or occlusion in the mesenteric bed is not as advanced as it is in relation to other anatomic areas. More is known of the sudden catastrophic episodes that offer the "acute abdomen" to the surgeon. It is the lesser grades of infarction with recovery that offer the puzzling diagnostic problems.

## Clinical Features of Mesenteric Artery Insufficiency\*

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In the past fifty years vascular disease, particularly arterial disease, has assumed an ever increasing role in medicine. A number of factors have contributed to this development. In the first place, the steady increase in life expectancy has provided a continually aging population and this has meant a progressive rise in the incidence of arteriosclerosis. Sir William Osler laid down the dictum that a man is as old as his arteries. Today we have more people with older arteries. We have learned better how to diagnose vascular disease. The radiologists have performed magic with their catheters and opaque fluids; they can now demonstrate the patency or disease of almost every artery in the body. Perhaps the most important as well as the most dramatic development in this field is the miraculous manner in which surgeons are able to replace arteries with synthetic tubes. There are only a few vessels which cannot be dealt with in this manner. The present discussion deals specifically with arterial disease as it affects the abdominal viscera.

The three important vessels are the celiac axis, the superior mesenteric, and the inferior mesenteric arteries, each with their many branches. These vessels are often described as end arteries; the statement is not entirely correct because they do have some anastomoses with each other. The superior mesenteric anastomoses with the celiac axis by way of the superior gastroduodenal artery and with the inferior mesenteric by way of Rioli's Arch. (Figs. 1 and 2.) Sudden occlusion of the superior mesen-

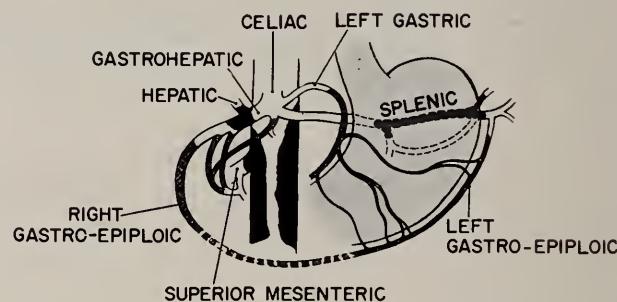


FIG. 1. Anastomosis of celiac axis and superior mesenteric artery by way of pancreaticoduodenal vessels. (Courtesy Arch. Int. Med. 114:765, 1964.<sup>1</sup>)

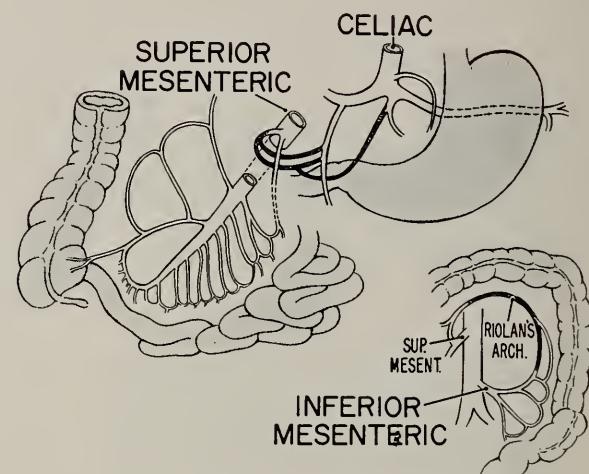


FIG. 2. Anastomoses of superior mesenteric artery to celiac axis and to the inferior mesenteric. (Courtesy Arch. Int. Med. 114:765, 1964.<sup>1</sup>)

teric artery is more serious than that of the other two vessels. Approximately 90% of the clinically significant vascular disease of the abdominal viscera is found in the distribution of the superior mesenteric artery. Obstruction of the blood flow in this vessel results in infarction of the bowel roughly from the third portion of the duodenum to the mid-transverse colon. Since arterial disease is more common in males than in females, and more prevalent after the age of 40 years, these are the groups most frequently affected.

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The clinical problems may be considered under three headings:

(1.) Massive or catastrophic vascular occlusion.

(2.) Minimal lesions producing small infarcts which may undergo ulceration followed by healing.

(3.) Abdominal angina.

#### Catastrophic Arterial Occlusion

Massive arterial occlusion is evidenced clinically by the sudden onset of severe generalized abdominal pain, usually cramp-like, occasionally constant. In the initial hours there are no clear cut diagnostic signs. Vomiting is almost invariable and in time may become fecal. Usually there is no diarrhea but when necrosis of the mucosa takes place, bloody fecal discharge may ensue. The abdomen is tender; the boardlike rigidity of perforated peptic ulcer is absent. Shock is absent at first, but appears in the later stages. Peristalsis may be active or suppressed in the early hours. As time passes, abdominal distension develops, necrosis of the bowel permits leakage into the peritoneal cavity; peritonitis is accompanied by the classic picture of shock with a fast weak pulse, drop in blood pressure, fever, leucocytosis, increasing distension of the abdomen, and cyanosis. The presence of an abdominal catastrophe is evident long before this fully developed picture is seen; hopefully a surgeon will have been called in consultation; the operating room and team will have been prepared and a minimum amount of time lost in proceeding with the operation. On opening the abdomen an amber to bloody, sticky peritoneal fluid is encountered. The involved intestine is boggy, edematous, heavy with fluid; it may be cyanotic or frankly gangrenous. The mesentery is thick and doughy; thick thrombosed vessels may be palpable in the mesentery. The surgeon's problems and decisions may be extremely difficult. If frank gangrene is present, the bowel so affected must be removed regardless of its extent. The removal of more than 50% of the small bowel may result later in nutritional problems, but under the catastrophic conditions encountered at the operation, it may also be life-saving. Resection of small bowel from

the ligament of Treitz to the colon is usually fatal in time although rare survivals have been reported. The preservation of even a short segment of small intestine may ultimately make the difference between survival and nonsurvival. Gangrenous bowel, however, must be removed. When the area involved is extensive the prognosis is grave, with mortalities as high as 75 per cent.<sup>2</sup> When the intestine is not frankly gangrenous, the surgeon must consider certain possibilities: Is it possible to remove the embolus? Successful embolectomy has been reported a number of times.<sup>3</sup> Can a graft be utilized?<sup>4</sup> Is the intestinal wall sufficiently viable to recover if its circulation is restored? Is there sufficient circulation to permit the bowel to live? Would massive anticoagulant therapy be helpful?<sup>5</sup> If the surgeon decides to treat without resection, he may reopen the abdomen in 18 to 24 hours to make certain that the viability of the bowel has been restored.

#### Minor Infarctions

Minor arterial occlusions with infarction of short segments of the bowel are even more difficult to diagnose correctly than are the major catastrophes. As a rule the clinician must be content with the diagnosis of an "acute abdomen" and await the surgeon's verdict with respect to the nature and extent of the lesion. When the involved segment is a short one, the problem is relatively simple and easily solved by resection. In some instances the diagnosis of localized infarction is made years later when a short segment of infarcted, but long since healed, partially stenosed bowel is found by x-ray, laparotomy, or autopsy. In a case reported recently by Cornish, Salzman and Ogura<sup>6</sup>, the duration was difficult to ascertain; acute symptoms (i.e. vomiting and tarry stools) had been present for 3 days; vague abdominal discomfort, anorexia, and loss of 30 pounds in weight had occurred over the previous 6 months; a cardiac infarction had occurred 20 years earlier. By x-ray the constricted segment of jejunum was approximately 10 cm. long. (Fig. 3.) At operation the involved area was 8 cm. long; the serosa was hyperemic with localized areas of hemorrhage; the en-



FIG. 3. Tubular narrowing of a loop of jejunum. (Courtesy Cancer Seminar, Penrose Cancer Hospital, 3:101, 1964.<sup>6</sup>)

tire mucosa and submucosa were ulcerated; the wall of the bowel consisted of thickened edematous muscularis. Organized and recanalized thrombi were found in vessels

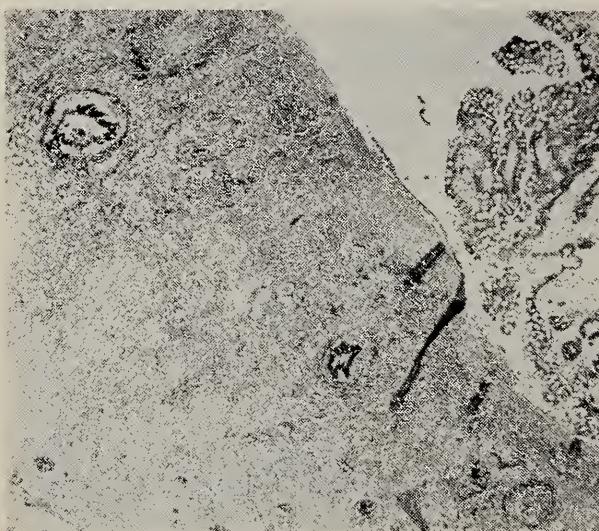


FIG. 4. Low magnification of lesion showing ulceration of mucosa and replacement of wall by vascular and cellular connective tissue. Note 3 large vessels with thrombosis and recanalization. (Courtesy Cancer Seminar, Penrose Cancer Hospital, 3:101, 1964.<sup>6</sup>)

thought to have belonged to the submucosa and in the adjacent bowel; hence the lesion was interpreted as an ischemic vascular ulceration of the bowel easily resected by the surgeon. (Fig. 4 and 5.) Presumably cases

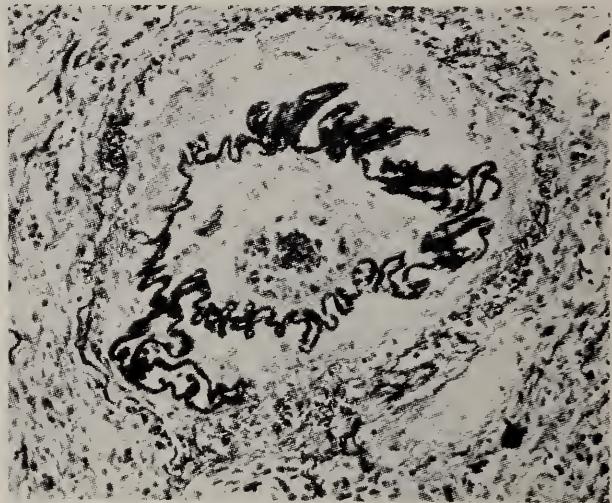


FIG. 5. Close-up of one of the thrombosed and recanalized vessels shown in the previous figure. (Courtesy Cancer Seminar, Penrose Cancer Hospital, 3:101, 1964.<sup>6</sup>)

such as this are rare, but perhaps many have been overlooked. Taylor, Gueft and Lebowich<sup>7</sup> have described a patient with bouts of abdominal pain for 3 years followed by the catastrophic picture of severe pain, ileus and shock. At autopsy, in addition to old and fresh ulcerations of the stomach and duodenum, there was widespread hemorrhagic necrosis of most of the jejunum and part of the ileum with severe atheromatous lesions of the aorta, many of the intimal plaques being eroded. Microscopic examination of the gastrointestinal tract showed numerous cholesterol emboli at the base of recent or healed ulcerations. The majority of such atheromatous cholesterol emboli were clinically silent; the larger ones produced vascular and intestinal lesions giving rise to the pain and other features of acute abdomen.

In some patients the occlusion of the superior mesenteric artery is massive but temporary. Joske and associates<sup>8</sup> describe 2 such patients with a diagnosis proved by operation. Both patients recovered following embolectomy. The subsequent roentgenologic studies in the first patient showed changes in the small bowel indistinguishable from those of regional enteritis. Intestinal malabsorption was demonstrated.

Marshak, Maklansky and Calem<sup>9</sup> describe a 67 yr. old white man who had had a coronary occlusion 4 years previously and was readmitted to the hospital with a 2 day history of chest pain. Electrocardiograms confirmed the diagnosis of acute myocardial infarction.

"Four weeks later, the patient complained of severe left upper quadrant pain, which was shortly followed by 24 hours of bloody diarrhea. Barium-enema examination 1 week later revealed a moderate degree of spasm, narrowing, and rigidity of the distal transverse and proximal descending colon. There was thickening of the folds associated with scalloping of the contours ("thumbprinting"). No discrete ulcerations were identified (Fig. 6 and 7). The presumptive diagnosis was

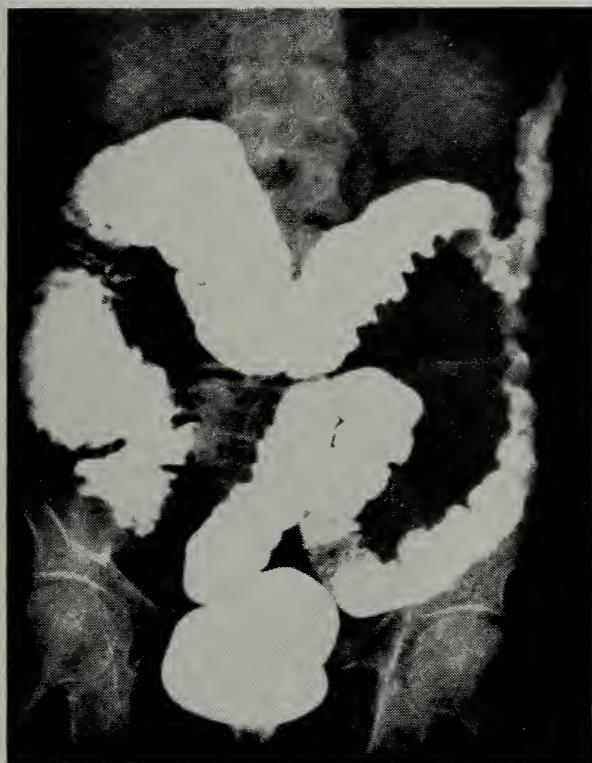


FIG. 6. Spasm, narrowing and rigidity of distal transverse and proximal descending colon with "thumbprinting." (Courtesy Am. J. Digest. Dis. 10:86, 1965.)

infarction of the colon, secondary to occlusion of the inferior mesenteric artery. The diarrhea and the abdominal pain disappeared within a week.

"A repeat barium enema 1 month later demonstrated a 5 inch segment of narrowing with smooth contours in the mid-descending colon (Fig. 8). The findings in the distal transverse colon were now confined to minimal limitation of distensibility of this segment of bowel. The thickened nodular folds were no longer seen. A third examination, after a 2 month interval, revealed reversibility of the lesion. (Fig. 9)



FIG. 7. Post-defecation view of area shown in previous figure. (Courtesy Am. J. Digest. Dis. 10:86, 1965.)

"Three months later, the patient died of acute coronary thrombosis. Postmortem examination revealed a thrombus occluding the inferior mesenteric artery, as well as marked atherosclerotic changes involving its mesenteric branches."

Similar cases producing chronic diarrhea and malabsorption but with survival have been described, such as those reported by Shaw and Maynard<sup>10</sup> and by Sedat and Pooler.<sup>11</sup>

Mesenteric venous thrombosis can also be reversible, as in the cases reported by Mayer and Poore.<sup>12</sup> The roentgenologic changes are rather characteristic as is shown in figures 10, 11 and 12 (12 days later).

#### Abdominal Angina

The concept of abdominal angina resulting from chronic mesenteric arterial insufficiency is not new. In my student



FIG. 8. Narrowing segment of mid-descending colon 1 month later. Splenic flexure now appears normal. (Courtesy Am. J. Digest. Dis. 10:86, 1965.)

days the mechanism of pain in angina pectoris was controversial, but soon it was shown to be due to disease of the coronary arteries with consequent myocardial ischemia; intermittent claudication was attributed to arterial disease of the legs. The possibility of abdominal pain on a similar basis secondary to disease of the celiac and mesenteric arteries was suggested. Clinicians realized that certain abdominal pains were related in time to the ingestion of food; the physiologic similarity between cardiac angina of effort and the abdominal angina of digestive effort seemed evident. The relationship, however, was difficult to prove. In 1936, Dunphy's<sup>13</sup> studies quite clearly differentiated the pain of mesenteric insufficiency from that of coronary insufficiency and provided a firm basis for the concept of intestinal angina.

In recent years, Reiner<sup>1</sup> and his associates particularly have studied mesenteric arterial disease at autopsy using injection

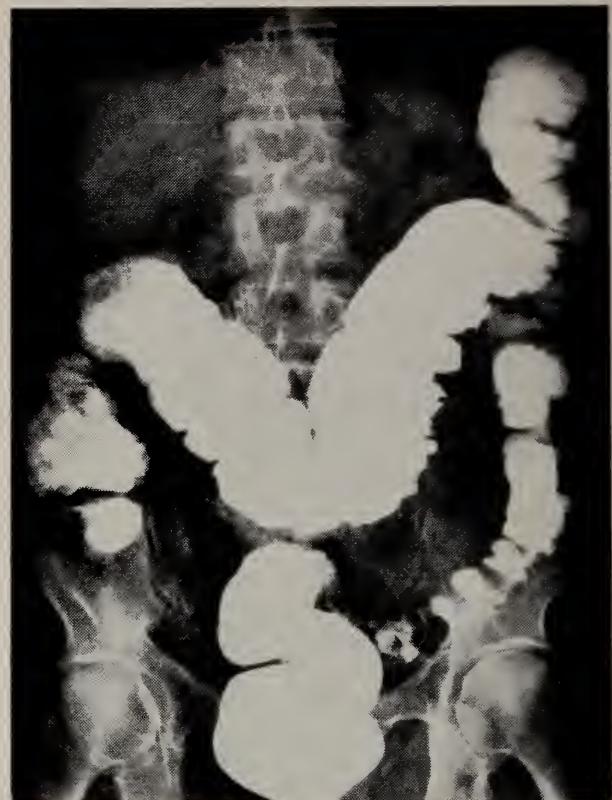


FIG. 9. Essentially normal colon 2 months later, showing complete reversibility of process. (Courtesy Am. J. Digest. Dis. 10:86, 1965.)



FIG. 10. "Thumbprinting" of transverse colon from mesenteric venous thrombosis. (Courtesy Arch. Int. Med. 114:359, 1964.<sup>12</sup>)

technics. The occlusions, in the majority of patients, were without clinical or anatomic sequellae but in some patients abdominal pain, diarrhea, melena and colonic sloughs had occurred or healed ulcers of the colon were found. In 2 instances embolic occlusion of the main superior mesenteric artery had failed to cause intestinal infarction. It is surprising to note that complete occlusion

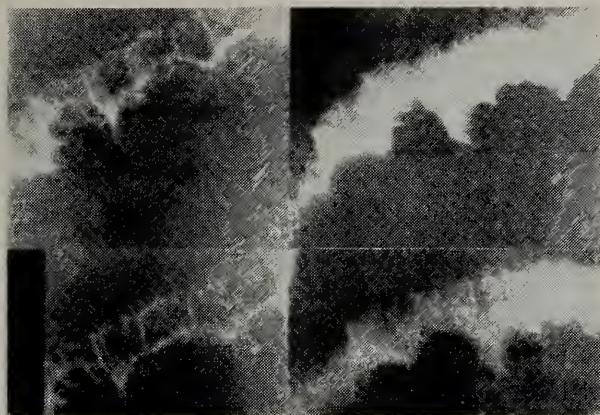


FIG. 11. Spot films of the transverse colon showing "thumbprinting" in greater detail. (Courtesy Arch. Int. Med. 114:359, 1964.<sup>12</sup>)



FIG. 12. Colon 12 days later, showing complete reversibility of the process. (Courtesy Arch. Int. Med. 114:359, 1964.<sup>12</sup>)

of any one of the main vessels, or indeed of all three, may occur without symptoms as in the case mentioned by Robb.<sup>14</sup> It appears that while sudden and complete occlusion of either the celiac axis, the superior mesenteric artery, or the inferior mesenteric artery is almost invariably fatal unless treated promptly by surgical embolectomy, by-pass, or some such procedure, gradual occlusion is quite different; severe occlusive disease of at least two of the three main arteries usually is necessary to produce symptoms.<sup>4</sup> It is important to note also that the syndrome of abdominal angina occurs only with atherosclerosis of the abdominal aorta with narrowing or occlusion of the mesenteric vessels at their ostia or within their first few centimeters. Thrombus formation distally may occur, but usu-

ally the artery beyond the stenosis is patent and free of disease.

The diagnosis of intestinal angina depends primarily upon the history, upon the analysis of the pain. In the initial weeks and months, the pain is a diffuse dull ache, poorly localized or generalized, sometimes perumbilical, rarely colicky, perhaps radiating to the back, and at times relieved by sitting up, as is the pain of pancreatic disease. Characteristically it begins toward the end of a meal or later—one, two or three hours later; it is steady and continuous when present; it may last for minutes only or for several hours. It is often worse following large meals; such patients may fare better on a regimen of small frequent feedings. Dr. Robb<sup>14</sup> has termed this "the small meal syndrome." As time passes, the pain becomes more severe and the patient becomes afraid to eat; the appetite is not impaired but the fear of eating results in loss of weight and malnutrition. The pain may become persistent in spite of starvation. When the pain becomes excruciating it may be accompanied by nausea and occasionally by vomiting. The more severe and constant the pain, the greater the imminence of infarction. Constipation may be present in the initial phases, often followed by the appearance of diarrhea, postcibal in timing. The malabsorption syndrome has been observed but, significantly, the diarrhea of mesenteric vascular disease is always accompanied by pain.

The abdominal examination as a rule is of no positive help unless an abdominal aneurysm is detected. Diminished or absent arterial pulsation in the lower extremities may be suggestive. Abdominal tenderness, rigidity and distension are minimal or absent; they eventuate only with infarction and the consequent peritoneal signs. The laboratory studies of the gastrointestinal tract yield normal findings or evidence of lesions not conceivably responsible for the pain. The abdominal films may disclose calcification in the abdominal aorta, dilatation of the aorta or even a frank aneurysm and thus suggest the presence of disease involving the ostia of the mesenteric vessels. In recent years, the development of aortography by either the translumbar or the retrograde femoral

technic has made it possible to diagnose these lesions more precisely preoperatively. Figure 13 is an arteriogram of the celiac-



FIG. 13. Arteriogram obtained with catheters in the ostia of the celiac axis and the superior mesenteric artery, the stomach distended with air, contrast media being excreted into the left renal pelvis and ureter. The normal vessels shown include the celiac artery branching into the splenic artery extending horizontally to the left of the patient and the hepatic artery to the right, branching into the descending gastroduodenal and thence into the right gastroepiploic which passed around the stomach to join with the left gastroepiploic. The superior mesenteric descends directly from its ostium and branches into many smaller arteries supplying the arcades of the intestine. (Dr. Klaus Ranniger, University of Chicago.)

plexus and superior mesenteric arteries and their branches made in a normal individual by Dr. Klaus Ranniger of the University of Chicago. The various anastomoses are well shown. Figure 14 is a similar arteriogram made in an individual suffering from abdominal angina. The narrowing of the superior mesenteric artery is evident, as is narrowing of the splenic and left gastric arteries. The patient was subjected to endarterectomy of the superior mesenteric vessel with relief from the pain.

#### Therapy of Mesenteric Arterial Disease

Maynard<sup>2</sup> has pointed out that the natural course of intestinal angina is one of inexorable progression to infarction. The pain is not relieved by antispasmodic drugs, sedatives, manipulations of the diet, or rest. Anticoagulants, nitroglycerine, and corticosteroids have no significant effect. Opera-



FIG. 14. Arteriogram of mesenteric vessels of patient with abdominal angina. The catheters again are in the ostia of the celiac and superior mesenteric arteries. The narrowing of the first several centimeters of the superior mesenteric artery is well shown. There is also some narrowing of the splenic artery in its first few centimeters and of the left gastric artery. The patient underwent an endarterectomy of the superior mesenteric artery with symptomatic relief. (Dr. Klaus Ranniger, University of Chicago.)

tion is resorted to because of the pain. Usually the bowel appears normal and the surgeon may not be aware of the correct diagnosis unless he palpates the celiac and mesenteric vessels and finds the pulsations to be strikingly reduced or absent. The blood flow through the superior mesenteric artery is all important and hence the first objective should be its restoration. One of the cases described by Morris, Crawford, Cooley and DeBaker<sup>4</sup> is so classical of the syndrome and so beautifully illustrated with pictures that I have taken the liberty to reproduce it here. (Fig. 15.) A man, 65 years of age, shown in A, gave a history of abdominal pain of 6 months' duration and a loss of weight of 47 pounds. The aortogram B showed extreme stenosis of the celiac artery and complete occlusion of the superior mesenteric as illustrated in the diagram in C. By-pass grafts were inserted between the aorta and the celiac artery and between the aorta and the superior mesenteric artery as illustrated in E; these were shown by aortography D to be functioning. Three months after operation the patient F had regained his weight and was free of pain.

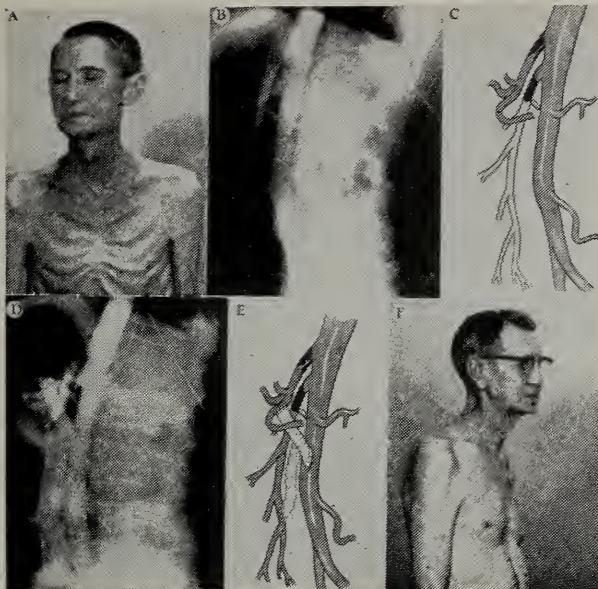


FIG. 15. (A) Photograph of a 65 year old man with abdominal angina of 6 months' duration and weight loss of 47 pounds. (B) Aortogram shows extreme stenosis at origin of celiac artery and complete occlusion of superior mesenteric artery. (C) Drawing showing pattern of occlusive disease in celiac and superior mesenteric arteries. (D) Aortogram after operation showing by-pass graft from aorta to celiac and superior mesenteric arteries. (E) Drawing showing by-pass technic for revascularization of celiac and superior mesenteric arteries. (F) Patient 3 months after operation asymptomatic had regained normal weight. (Courtesy Arch. Surg. 84:95, 1962.)

#### Differential Diagnosis of Abdominal Angina

In describing the clinical picture of intestinal angina the character of the pain has been emphasized. I should like to point out the difference between abdominal angina and certain other pains likewise induced by the ingestion of food and seemingly producing the small meal syndrome of Robb. A high gastric resection or a total gastrectomy produces a sort of "small stomach," but there is, first of all, the history of the operation and, second, the distress induced by the intake of food is that of the dumping syndrome rather than pain. An infiltrating gastric neoplasm giving a *linitis plastica* deformity of the stomach is appropriately designated by the French as a "stomach in miniature." It is truly a small stomach, rigid, not distensible by food or air. The patient is able to eat only a small meal; larger amounts either do not go down or they are quickly regurgitated. Pain is not a prominent feature. Gastric and pancreatic neoplasms in general, and indeed any intraabdominal neoplasm including metastatic cancer of the liver, may be accompanied by

this small meal syndrome, but there is a difference. In angina, the limiting factor is pain induced by food; in neoplastic disease, abnormal satiety, anorexia, even nausea, dominate the symptomatology and curtail the meal. In peptic ulcer, food relieves the pain, although the patient's history frequently gives the opposite impression. The error may be detected by careful observation of the food-pain sequence preferably under hospital conditions. The discomfort of an irritable colon, the so-called "functional bowel distress" is typically made worse or induced by food-taking; the small meal syndrome is present, but with many differences. Bowel distress has usually been present for months or years; it is rarely progressive; it is less severe than angina; it is rarely accompanied by loss of weight; it may be accompanied by intermittent cramp-like pain; and it may be relieved by the passage of flatus or feces. In short, the pain of intestinal angina is qualitatively quite different from any of the usual abdominal syndromes.

#### Summary

The purpose of this paper has been to emphasize the importance of abdominal arterial disease. It may be manifested in various ways:

- (1.) Massive infarction of the bowel produces a catastrophic event which should be dealt with surgically immediately. The mortality rate is high.
- (2.) Minor infarctions of the bowel may pass unrecognized; they may heal or they may produce chronic ulcerating lesions. Moderate stenosis usually results with symptoms of transient and incomplete obstruction.
- (3.) The much debated concept of abdominal angina arising from stenosis or occlusion of the arterial ostia has been amply substantiated. As Maynard<sup>2</sup> has pointed out, the natural course is one of inexorable progression to infarction. The miracles of modern vascular surgery, however, have removed this disease from the category of the incurable.
- (4.) The clinical features of the vascular "small meal syndrome" may be simulated

by other intraabdominal conditions but on careful inquiry the differentiation is rarely difficult. The demonstration of arterial disease elsewhere in the body is helpful. The most direct evidence is afforded by arteriograms of the mesenteric vessels or by the surgical demonstration of arterial disease.

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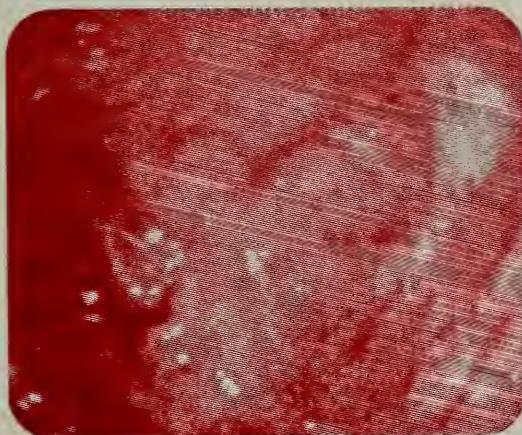
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## CLINICOPATHOLOGIC CONFERENCE

### Baptist Memorial Hospital\*

#### Common Duct Stone and Abscess

This 76 year old white woman was admitted to Baptist Memorial Hospital for the first time on Nov. 7, 1964, because of shock and jaundice. About 4 weeks prior to admission the patient developed generalized myalgia, loss of appetite, and fatigue. She had apparently not had nausea or vomiting, and there had been no known chills or fever. About 1 week before admission she went to her physician for these symptoms and received treatment with temporary improvement. However, about 36 hours before admission the patient collapsed to the floor and remained there for 2 to 3 hours before she was discovered by a member of her family. She was immediately taken to her physician who found her to be clammy with a B.P. of 70 systolic. Previously it had been in the range of 170 systolic. There were no focal neurologic signs. There had been some diarrhea earlier, but the exact details of this were not known. Careful and repeated questioning concerning the possibility of contact with or ingestion of toxins failed to reveal any evidence of same. The patient had probably had some decrease in urinary output during the 2 or 3 days before admission.

*Past history* revealed the patient had mild diabetes mellitus which had been adequately treated with oral hypoglycemic agents in the past. At one time she had had some "gravel" in the urine but there had been no other urinary complaints. She did not give a history of jaundice, and there was no history of significant alcoholic intake. There was no history of specific food intolerance. It was thought by the family that the patient had lost about 15 lbs. in the past 9 months. She gave no history of recent injections. She had had no headache nor were there any meningeal signs.

*Physical examination* revealed the T. to be 98°, P. 100, R. 20, and B.P. 90/50. The patient was described as being weak; appeared jaundiced and her hands were moist and cool. Sclerae were icteric. There was no distention of the neck veins. No abnormalities were found in the structures of the head, nor in the heart or lungs. The abdomen was obese. There was vague, generalized tenderness, and a right upper quadrant mass was described on percussion. The spleen was not palpable. Bowel sounds were described as normal. A careful neurologic examination failed to reveal any abnormalities.

*Laboratory findings:* On Nov. 7 the HCT. was 42% with icteric plasma. Hgb. was 13.3 Gm., WBC. 18,300 with 89% P.M.N., 8% lymphocytes and 3% monocytes. The platelets were normal in smear and the red cells were normal in appear-

ance. Serum amylase was 97 BMH starch-iodine units. Alkaline phosphatase 13 K-A units. Bilirubin 6.9 mg. with 3.9 mg. direct and 3 mg. per 100 ml. indirect. The urine was positive for bile and negative for urobilinogen. Plasma glucose was 100 and the BUN. 64 mg. per 100 ml. Serum sodium was 132, potassium 3, chloride 94, and bicarbonate 25 mEq/L. Urinalysis revealed a specific gravity of 1.016 with a pH of 5.5, 2+ protein and negative sugar. There were 3 to 8 R.B.C. and 5 to 10 W.B.C./hpf. An occasional white cell cast was seen. The patient's prothrombin time was 20 sec. with a control of 13.5 sec. SGOT was 73 units and serum creatinine was 4.8 mg., serum cholesterol was 179 mg. per 100 ml. Urine culture grew out an *Aerobacter aerogenes* which was sensitive to many antibiotics. Repeated stools for occult blood were negative. On Nov. 16, the total protein was 4.4 Gm. with an albumin of 2.2 and a globulin of 2.2 Gm. per 100 ml. Three blood cultures were negative. On Nov. 30 there was 14 BSP. retention at 45 minutes. Leptospiral agglutinations were negative.

Chest x-ray on Nov. 7 was negative. Supine film of the abdomen failed to reveal any definite abnormalities. Lumbar spine films on Dec. 2 revealed no evidence of neoplastic disease. There was old narrowing of the 4th disc space noted with hypertrophic spurring adjacent to this. On Nov. 23, a barium enema revealed diverticulosis of the sigmoid colon and an irritable colon. No extrinsic pressure or intraluminal mass was seen. On Nov. 24, a G.I. series showed the stomach to empty satisfactorily and the duodenal cap was noted to be rather large and redundant. There was a prominent defect at the base of the cap which had the appearance of gastric prolapse. There was no indication of chronic ulceration and no evidence of an active ulcer crater. There was some radiolucent mottling overlying the cap which was thought to represent a mixture of air with barium. A scout film of the abdomen showed enlargement of the liver. An EKG was normal.

At the time of admission the patient was critically ill with clinical evidence of shock and jaundice. She was noted to be rather severely dehydrated. Her urine output during the first few hours in the hospital was nil. She was given metaraminol (Aramine) with a good response of her blood pressure and was given carefully calculated amounts of intravenous fluid and was also given mannitol. Over the next several hours the patient began to excrete adequate amounts of urine and by the day after admission the urinary output was excellent. She was also given one unit of plasma during her initial treatment.

She was given vitamin K and started on tetracycline after blood cultures were obtained. She was maintained on carefully controlled intravenous fluids, and after there was some fall in the serum potassium she was given supplementary potassium with correction of this deficiency. Her BUN. decreased progressively and by the time of her discharge from the hospital it was 15 mg. Her

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strength improved progressively. By Nov. 14 she was alert mentally and the blood pressure was stable. Urinary output was excellent and the scleral icterus was diminishing. Serum bilirubins decreased progressively and by Nov. 16 the total bilirubin was 1.8 with a direct of 1.1 mg per 100 ml. On this same date the W.B.C. had fallen to 11,500 and a phase platelet count was normal. By Nov. 18 the patient was eating fairly well, but had some nausea which was well-controlled by symptomatic medication; there was no vomiting. On Nov. 25 the patient was transferred to the Lamar Unit. She continued to improve and on Dec. 7, prothrombin time was 14 sec. with control of 12 seconds. She had numerous SGOT determinations done and these ranged between 55 and 80 units. On Dec. 3 a liver scan was done. This revealed an enlarged liver. The distribution of the Au189 uptake was not uniform but showed numerous small areas which were "cold". The distribution of the uptake and the generalized enlargement of the organ were thought to be more indicative of cirrhosis. There were no well delineated areas suggestive of massive tumor. On Dec. 8 a needle biopsy of the liver was obtained. The microscopic diagnosis was hepatitis with periportal fibrosis. It was commented that the predominant finding was a focal, acute and chronic inflammatory response which was predominantly portal but could also be seen in parenchyma. Portal fibrosis was seen in a few areas but one could not be certain of definite cirrhosis. Bile pigment was present in liver cells. The patient continued to improve, though she did complain of some recurrent nausea and occasional dull pain in the right side. She received Maalox repeatedly for "indigestion." On Dec. 15 she was discharged to a nursing home.

The patient was readmitted here on Feb. 5, 1965, because of the development of severe nausea and had begun vomiting. On the day of admission a watery diarrhea developed. She had been maintained on small doses of steroids while in the nursing home, and the urine sugar had been 2+ on the day of admission. Physical examination revealed the patient to be very weak and dehydrated and moderately jaundiced; there were no palpable lymph nodes and the lungs were clear. There was no evidence of cardiac enlargement. B.P. was 80/50 and P. 130 and regular. Her T. was 101.5° R. On examination the liver was palpable to the midabdomen and approximately 2 in. across the midline. There was moderate tenderness in the right upper quadrant. The spleen was not felt and no other masses were noted in the abdomen. Bowel sounds were high-pitched.

Plasma glucose was 430 mg. per 100 ml. and she was given supplementary insulin to control this. The H.C.F. was 53% with a W.B.C. of 19,100 with 94% P.M.N., 2% bands, 3% lymphs, and 1% monocyte. Urinalysis revealed a specific gravity of 1.018 with a pH of 7.5, protein 2+ and glucose 2+. There were 75 to 100 W.B.C. hpf., occasional R.B.C. were seen; there were no casts.

Prothrombin time was 16.5 sec. with a control of 14 sec. Urine culture grew out Proteus. Alkaline phosphatase had risen to 18 K-A units and blood ammonia was 246 mcg. per 100 ml. At the time of admission her BUN. was 52 mg. per 100 ml.

The patient was again rehydrated and her BUN. fell to 40 mg. Total bilirubin on Feb. 6, was 10.3 mg. with 6.6 mg. direct and 3.7 mg. indirect. She had some hyponatremia which was corrected with intravenous fluids. During the remaining 6 days of her life the patient had intermittent fever with T. in the 100 and 102° range. Because of the development of rapid auricular fibrillation, the patient was digitalized and maintained on digoxin. She was begun on chlortetracycline and chloramphenicol and was also given large doses of Solu-cortef. She complained of upper abdominal pain on occasion. On Feb. 9, she was described as being drowsy and confused but was able to swallow liquids. She became progressively more obtunded. Urine output remained good. On Feb. 12 the blood pressure fell and she developed clinical evidence of shock. She was given Levophed with some temporary improvement but remained comatose and expired on the afternoon of Feb. 12, 1965.

### Discussion

DR. PERVIS MILNOR, JR.: It is apparent from the protocol that this is an exercise in the differential diagnosis of jaundice complicated by three episodes of shock—the last culminating in the death of the patient. To consider the second of these dramatic phenomena first, shock can be thought of as an abnormality occurring in a closed system consisting of a container, a fluid content, and a pump. A fall in pressure could occur, therefore, from a disparity between the volume of the fluid contents and the size of the container, or a malfunction of the pump or a combination of these. In this case, the essentially normal values for hemoglobin and the failure to demonstrate blood loss or blood destruction suggest that loss of red cell mass was not a significant factor. Although dehydration may have been important in the first instance and perhaps in the second episode of shock, it certainly was not a dominant factor in the third and last. In a person of this age group, involvement of the pumping mechanism by a cardiac catastrophe such as a myocardial infarction would be a statistical likelihood. The recurrence three times, the excellent response to therapy in the first two attacks, and the absence of EKG

confirmation tend to rule out this possibility. The occurrence of the shock state each time in association with pronounced leukocytosis seems more than a chance occurrence and suggests gram-negative septicemic shock. Recent studies indicate that the basic phenomenon in this "septicemic shock" is myocardial depression more than vascular dilatation, but regardless of which is the dominant factor, this would appear to be the cause and type of shock seen here. Sudden neurologic insults can certainly produce hypotensive episodes; historically, there was none here.

A consideration of the source of this septicemia would appear to be next in order. We are told early in the protocol that the patient's history revealed "mild diabetes mellitus" and "gravel in the urine." Laboratory studies on admission to the hospital showed a very interesting urinalysis, with 2 proteinuria, 3 to 8 red cells, 5 to 10 white cells, an occasional white cell cast; also creatinine 4.8, BUN 64, and abnormal electrolytes, particularly sodium 132 and potassium 3. Although some of these findings might be related to her fever and dehydration, they also fit very well with chronic pyelonephritis which diagnosis is certainly suggested by the two historical findings mentioned above. To substantiate this thought, urine culture produced *Aerobacter aerogenes* which is one of the organisms frequently associated with gram-negative septicemic shock.

Although the above makes a very pat sequence of events to explain the observed shock state, it by no means covers all of the possibilities. Let us, therefore, redirect our attention to this patient's jaundice. We are told that the present illness apparently began with myalgia, loss of appetite, and fatigue. These symptoms apparently progressed very slowly, perhaps intermittently, and thinking in terms of her jaundice, would certainly suggest an infectious hepatitis. Although often rather more dramatic, this type of onset is compatible with a second diagnostic possibility—Weil's disease. The progression of this case obviously requires more than uncomplicated acute infectious hepatitis, but if we add subacute infectious hepatitis progressing to hepatic

necrosis and this in turn to postnecrotic cirrhosis, we have a clinical sequence which might explain many of our findings. The clinical variability of Weil's disease allows it to fit many aspects of the picture without additional complications. For instance, leukocytosis to this extent is incompatible with acute infectious hepatitis but might be seen in subacute hepatic necrosis; it is quite compatible with Weil's disease. The persistent and rather marked febrile response is comparable to the leukocytosis. The persistent finding of right upper quadrant tenderness with suggestion of a mass is also acceptable. The degree of leukocytosis and fever suggests an additional diagnostic possibility, namely, cholecystitis-cholelithiasis progressing, in accordance with other findings to be mentioned below, to suppurative cholangitis and multiple hepatic abscesses. Finally, particularly in view of the history from the family of significant weight loss over a nine month period, the possibility of metastatic carcinoma must be included. Occasionally, onset in malignancy can simulate infection; necrosis of tissue in malignancy can result in both fever and leukocytosis although commonly not to this extent. At this point, it should be mentioned that although there was no history of recent injections or exposure to hepatotoxic agents, a "toxic hepatitis" or even homologous serum hepatitis would be expected to be similar clinically to infectious hepatitis, might well show the same subacute and hepatic necrosis, progressing to postnecrotic cirrhosis. Inasmuch as clinical differentiation of toxic from infectious hepatitis on the basis of information here available is difficult if not impossible, these diagnoses from here on will be considered together.

Pertinent to the discussion at this point would be liver function studies. The presence of jaundice was certainly documented by a bilirubin of 6.9 mg. I don't consider the separation into direct and indirect components diagnostically important. The slightly elevated alkaline phosphatase of 13 K-A units is much more compatible with infectious or toxic hepatitis than either obstructive jaundice or carcinoma metastatic to the liver; in the last two conditions we

would expect a much more marked elevation. The modest SGOT elevation to 73 units is rather surprising inasmuch as a much higher value would be expected in any of the hepatic diagnoses except metastatic carcinoma. The prolonged prothrombin time to 20 seconds could represent advanced intrinsic liver disease, but apparently did not in view of its return approximately to normal during the course of her first hospitalization. Finally, although the low total serum protein of 4.4 gm. with 1:1 AG ratio might be considered evidence of chronic hepatocellular disease, it must be remembered that the plasma proteins are quite sensitive to many other pathologic processes, particularly chronic infection and metastatic carcinoma. In summary, then, it can be said that certain of the liver studies are compatible with each of our four major diagnostic possibilities—*infectious hepatitis*, Weil's disease, cholecystitis with suppurative cholangitis, and metastatic carcinoma—but fail to direct us toward any particular one.

Additional studies were done which appear most pertinent, particularly the liver scan and liver biopsy. The liver scan showed an enlarged liver but, more importantly, a moth-eaten appearance of multiple "cold" areas. I consulted the authorities and find that on the average, a "dead area" must be about 1.5 cm. in diameter to be picked up by scanning technics. These multiple "cold areas" then are grossly nodular and far more than microscopic areas of tissue destruction or replacement. Additionally, the needle biopsy showed no tumor cells but areas of acute and chronic focal inflammation, relatively little fibrosis, but definite pigment staining of liver cells. Neither of these laboratory findings can be considered diagnostic. Although the scan is compatible with metastatic carcinoma, the failure of the biopsy to show any malignant cells with such widespread involvement must be more than coincidence. I am inclined to assign more than a little significance to the biopsy finding of inflammation, predominantly portal rather than parenchymal, predominantly focal rather than diffuse; this, to me, suggests cholangitis rather than infectious hepatitis. On the scan, chol-

angitis would not seem to explain the "cold areas" but multiple hepatic abscesses certainly could.

At this point, it remains to tie together these various findings with the patient's hospital course. On the initial hospitalization, the patient was treated with broad spectrum antibiotics plus rehydration, and the response was dramatic. The disappearance of the signs of infection suggests that the antibiotics were effective; it does not tell us whether the infection was in the GU tract or the biliary system—we can make a good story as indicated above for either one. The clearing of the patient's jaundice does suggest an improvement in some process in the biliary tract, although the persistent abnormal transaminase values best correlate with continued hepatocellular inflammation. Approximately 2 months later the patient was readmitted with a clinical picture similar to the first admission. She was again treated with antibiotics and rehydration, again with a good response initially. Unfortunately, on this second admission, improvement was not maintained. The blood pressure fell for the third time approximately a week after admission, and on this last occasion, failed to respond to therapy. It would appear unlikely that infectious or toxic hepatitis leading to subacute hepatic necrosis and to postnecrotic cirrhosis would be associated with such exacerbations and remissions of symptoms. Weil's disease as mentioned above could certainly produce the clinical picture of the first hospitalization, but it is difficult to imagine a recrudescence of leptospirosis after an asymptomatic interval of 2 months' duration. It is similarly difficult to explain in terms of metastatic carcinoma a virtual disappearance of symptoms and findings for a 2 month period only to recur suddenly in fatal form. I tend, therefore, to lean toward cholelithiasis with recurrent suppurative cholangitis—this despite the fact that certain of the liver function studies are quite incompatible with such a diagnosis. Nevertheless, the preponderance of the evidence, particularly the marked leukocytosis, the marked fever, the apparent response to antibiotics, and particularly the liver scan and biopsy, all fit this diagnosis.

We now return to the first diagnosis of chronic pyelonephritis. As mentioned earlier, this offers a reasonable explanation for gram-negative septicemia with shock; so does the diagnosis of suppurative cholangitis with hepatic abscesses. I am unable to determine which focus of infection was the more important in this case. We can correlate waxing and waning of the signs of liver involvement better with the clinical course than we can any signs of renal involvement. I favor the hepatic infection as the more important one, although either or both would have been involved in either episode of shock.

In summary then, my diagnoses are as follows: (1) Cholelithiasis with suppurative cholangitis and multiple hepatic abscesses; (2) chronic pyelonephritis, (3) diabetes mellitus. I believe that death was due to uncontrolled bacterial infection of the liver and biliary passages.

DR. JAMES A. PITCOCK: The principal findings in this 76-year old woman were in the right upper quadrant. By the time of death, she had ascites of about 1,000 ml. made up of clear yellow fluid. In addition, there was a very large abscess in the upper right quadrant which was both subdiaphragmatic and subhepatic in the region of the hilus of the liver. This was walled off from the general abdominal cavity and was filled with purulent material which appeared to be bile stained. On further examination, it was found that this abscess communicated with a hole in the common duct. There was a stone in the common duct just distal to this perforation with dilatation of the common duct proximal to it, indicating biliary tract obstruction prior to perforation of the common bile duct. Purulent material was found within the common bile duct, within the hepatic duct, and on multiple sections through the liver itself. The purulent material appeared to be within dilated bile ducts. There were no gross parenchymal abscesses. The kidneys had scars of old pyelonephritis but microscopically this was not active at the time of death. The pancreas did not show any significant changes in the islets. The gallbladder was intact. There were microscopic changes of chronic cholecystitis, but at the

time of autopsy there were no stones within the gallbladder.

Microscopically, we can compare the findings in our liver biopsy with those in the postmortem liver to get some idea of pathogenesis. (Fig. 1.) Here we have por-



FIG. 1.

tal triads which are infiltrated with acute and chronic inflammatory cells. There are none actually within the small bile ducts themselves. At the time of this biopsy, we find no evidence of bile plugging in the larger portal bile ductules, no evidence of bile lakes or of bile infarcts. We have to remember that this biopsy was taken at the time the jaundice was apparently subsiding and down to a fairly low level. Perhaps we should have emphasized that many of the inflammatory cells are neutrophils. By the time of postmortem, the inflammation is much worse. Several features which were not prominent in the biopsy are obvious here (Fig. 2). Bile duct proliferation is

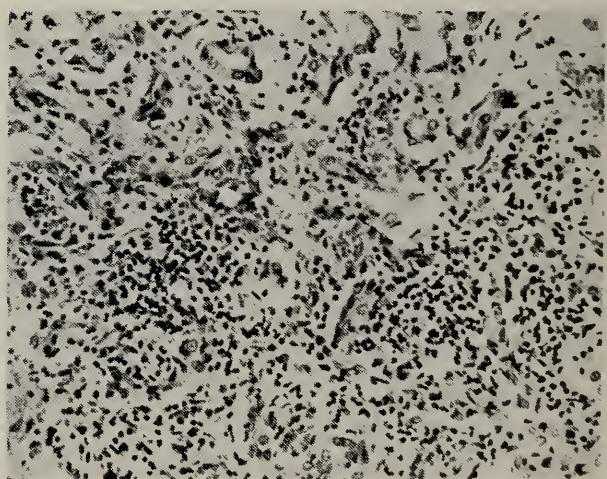


FIG. 2.

quite obvious by the time of autopsy. The inflammatory process can be seen within the biliary system and is more extensive. In addition, the amount of portal fibrosis is considerably greater.

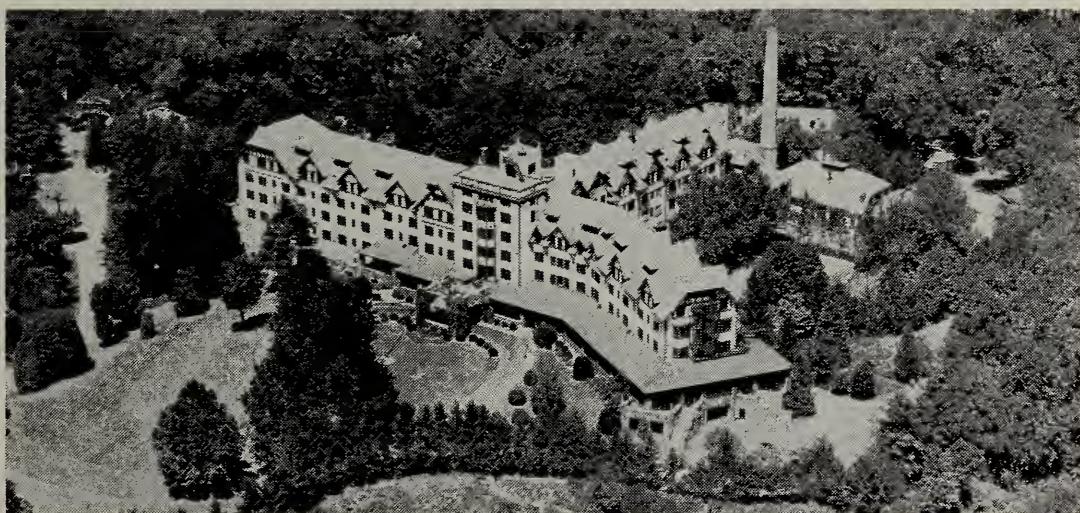
In summary, we have a stone in the common duct which has perforated the common bile duct. There is an acute and chronic cholangitis and an abscess in the hilar and subdiaphragmatic regions secondary to this

perforation. There is also early biliary cirrhosis, chronic cholecystitis and scars of old pyelonephritis. We do not know when this perforation of the common bile duct took place. There may well have been a fairly free flow of bile out into the hilar and subdiaphragmatic regions, and certainly microscopically we do not have bile plugging we expected with an extrahepatic obstruction. Undoubtedly there must have been extrahepatic obstruction at some time.

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## 1966 T.M.A. STATE AND COUNTY OFFICERS CONFERENCE

**Sunday, February 27, 1966 • Hermitage Hotel, Nashville, Tennessee**

- 9:30 A.M. — REGISTRATION**
- 10:00 — CALL TO ORDER**  
G. Baker Hubbard, M.D., President-elect, TMA, Jackson
- 10:15 — SYMPOSIUM: "THE PROPER ROLE AND RESPONSIBILITIES OF COUNTY, STATE AND NATIONAL MEDICAL GROUPS"**  
A. Roy Tyrer, Jr., M.D., President, Memphis-Shelby County Medical Society, Memphis  
John H. Burkhart, M.D., President, Tennessee Medical Association, Knoxville  
Leo E. Brown, Assistant to Executive Vice-President, American Medical Association, Chicago
- 11:15 — "STIMULATING PARTICIPATION IN MEDICAL SOCIETY AFFAIRS"**  
C. Lincoln Williston, Executive Secretary, Texas Medical Association, Austin
- NOON — LUNCHEON: "MEDICAL PRACTICE AND POLITICS"**  
Hoyt D. Gardner, M.D., Member of the Board, American Medical Political Action Committee, Louisville
- 1:30 P.M. — CALL TO ORDER**  
John H. Burkhart, M.D., President, TMA, Knoxville
- 1:35 — PANEL DISCUSSION: "AS OTHERS SEE US"**
- MODERATOR:**  
Jim Reed, Director of Communications, American Medical Association, Chicago
- PANELISTS:**  
Lee Anderson, Editor, Chattanooga News-Free Press, Chattanooga  
John Reese, Director of Programming, WATE-TV, Knoxville  
Sam M. Fleming, President, Third National Bank, Nashville  
Clyde M. York, President, Tennessee Farm Bureau Federation, Columbia
- 2:40 — QUESTION AND ANSWER PERIOD**
- 3:00 — "LOOKING AHEAD"**  
Edward R. Annis, M.D., Past-President, American Medical Association, Miami

From the  
Executive  
Director

# MEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### TMA's Annual Meeting Set for Gatlinburg

● The 131st Annual Meeting of the Tennessee Medical Association will be conducted April 17-19, 1966, at Gatlinburg, with headquarters at the Civic Auditorium. Meetings and other activities will be conducted in the several hotels. Highlights will include scientific programs of sixteen specialty societies; scientific and technical exhibits; the annual sessions of the House of Delegates; special award to the Outstanding Physician of the Year, and Distinguished Service Awards. In addition, TMA will sponsor a continental breakfast for all members on Tuesday, April 19th, at the Riverside Hotel, to hear Mr. John McCarty, Assistant to the President of Rockford College, Rockford, Illinois. He will give an interesting and illustrative presentation on "How to Transmit Ideas to Community Groups".

### Housing for Annual Meeting

● The Gatlinburg Chamber of Commerce will coordinate housing for those attending the TMA annual meeting. Physicians or their families should direct their requests, listing preferences, to the Gatlinburg Chamber of Commerce, which will forward a request to the facility of your choice. Every physician was mailed a reservation form early in January. The 1966 meeting will be held from Sunday through Tuesday (April 17-19).

### House of Delegates

● The Sunday meeting of the House of Delegates has been scheduled for 1:00 P.M. (EST). The House will meet for its opening session on Sunday and again on Tuesday Morning, April 19th.

### Reference Committees

Following the first session of the House, all reports, resolutions, and amendments will be assigned to Reference Committees. The Reference Committees will meet on Monday, April 18th, when members of the House of Delegates and any TMA member may appear before any Reference Committee for whatever testimony desired. After the hearings, the Reference Committees will prepare reports and present their recommendations to the House at the Second Session on Tuesday, April 19th.

### Specialty Societies

● Specialty societies and related medical organizations will hold sessions on all three days of the annual meeting. Sixteen groups will participate.

### Social Events

● The principal social event will be the President's Banquet on Monday Evening, April 18th, in the Mountain View Hotel. A social hour will precede the banquet, beginning at 6:00 P.M. The banquet will begin at 7:00 P.M., and followed with dancing to the music of Jerry Collins and his orchestra from Knoxville.

### Medicare Regulations Still Being Determined

● At the present time there is little more that can be definitely stated about the rules and regulations concurrently being promulgated by the Department of Health, Education and Welfare under the provisions of the new "Medicare" Law—in that the final policies and plans are still on the drafting board, as of this writing.

inspections are violations of the law in regard to the activities of pharmacists and physicians, and dispensing or renewing any prescription more than six months old or for more than five times, even if ostensibly authorized by a physician, is a violation for the pharmacist.

Regulations to be promulgated in the future will specify the drugs to which the law applies.

- "Spotlight on Medicine," a series of 30-minute public service television programs, is being produced each Sunday at 1:00 p.m. in Jackson over WDXI-TV in cooperation with the Consolidated Medical Assembly of West Tennessee and TMA.

The program utilizes a professionally produced and medically correct film segment plus a panel of local physicians. The series is scheduled for 13 consecutive Sundays and a total of 39 members of the Consolidated Society will participate on the panels.

A wide variety of medical topics will be discussed during the series including heart attack, diabetes, breast cancer, stroke, appendicitis, arthritis and many others.

The Public Service Committee of TMA is providing members of the local society with over 25,000 "statement stuffer" announcements and waiting room display cards to help publicize the program.

Efforts are now underway to program the series in several other metropolitan areas in cooperation with the public service committees of the local county medical societies.

The series furthers many public service objectives, including health education, career recruitment, upgrading the public awareness of good medical standards and it helps to create a respect for and understanding of medical tradition.

- Dr. John H. Burkhart, TMA president, has been nominated by the Knoxville Academy of Medicine as a candidate for "Mr. Knoxville."

The award is presented annually by the Greater Knoxville Chamber of Commerce to an individual whose public service activity has been outstanding during the current year.

Dr. Burkhart has long been active in civic, educational and church work in addition to his many activities in organized medicine on the local, state and national level. He was elected to a 4-year term on the Knoxville Board of Education in 1957 and again in 1961 and he served as Chairman of the Board for seven of the eight years.

- The American Medical Association has moved the Community Relations Department from the Communications Division to the Field Service Division.

Mr. Darrell Coover will continue as its director and Mrs. Sue Boe will be Field Representative for Community Relations.

The basic goal of Community Relations is to increase liaison with civic, public, religious, fraternal and other groups at the local, state and national levels.

- The AMA sponsored a national conference on federal medical assistance programs in Chicago January 20-21. The conference was attended by representatives of state medical associations, state welfare and public health departments and departments of the federal government responsible for implementing the programs.

Dr. Phillip R. Lee, assistant secretary of HEW; Dr. Ellen Winston, commissioner of the Welfare Administration, HEW; Mr. John Hurley, acting director of the Bureau of Family Services; Katherine Oettinger, chief of the Children's Bureau and Dr. Julius Richmond, director of project "Head Start" were among the speakers on the program.

Drs. Baker Hubbard, K. M. Kressenberg and A. Roy Tyrer represented TMA at the meeting.

- The TMA State and Officers Conference, Sunday February 27, 1966, Hotel Hermitage in Nashville.

## Television Series Begins in Jackson

## Dr. John Burkhart Nominated for Public Service Award

## AMA Expands Field Service

## Conference Held On Title XIX

## Don't Forget!

## The Tennessee Medical Association

# 1966 ANNUAL MEETING

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**April 17-19, 1966**

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- THE WOMAN'S AUXILIARY  
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- SPECIAL EVENTS  
Luncheons, dinners, etc., for  
Various Groups
- BREAKFAST MEETING: TUESDAY, APRIL 19  
Hear Mr. John T. McCarty, management consultant and  
assistant to the President of Rockford College, Rockford,  
Ill., speak on "HOW TO TRANSMIT IDEAS TO COM-  
MUNITY GROUPS"
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*Refer to March Issue of The Journal  
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TIMES — PLACES — SUBJECTS — SPEAKERS

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February, 1966

# President's Page

## AMPAC AND IMPACT



DR. BURKHART

The majority of physicians know that AMPAC (American Medical Political Action Committee) is an arm of the American Medical Association set up separate and distinct from the AMA, but under its general guidance. The physicians of Tennessee know that IMPACT (Independent Medicine's Political Action Committee—Tennessee) is the Tennessee Medical Association's organization on the state level structured to be a part of and work with AMPAC. The Board of Directors of IMPACT is appointed by the Board of Trustees of TMA and funds for administrative and educational purposes are contributed by TMA to IMPACT. Membership in IMPACT is on a voluntary basis and consists of the payment of \$25 annual dues which entitles the contributor to membership in both IMPACT and AMPAC and the distribution of his dues in such a manner as to be effective on both the local and national level.

All of this is repetitious and undoubtedly understood by most Tennessee physicians, yet I am sure many do not know that during the year 1965 only a handful of TMA members joined either AMPAC or IMPACT. As a matter of fact, the national headquarters of AMPAC lists no Tennessee members. What apparently has happened was that many Tennessee physicians joined these organizations in the heat of the campaigns of 1964, but made no effort to continue their membership during 1965 which was an off election year. Furthermore, there was no concerted drive in 1965 to acquire memberships by the Board of Directors of IMPACT so that as we enter a new year we must enter also into a new period of membership solicitation for IMPACT and AMPAC.

1966 is another election year. In Tennessee, all House of Representative seats are subject to election as is likewise one Senatorial seat and the office of Governor. Although we have lost one big battle in our continued fight against creeping socialism and for the principles of free enterprise, we have not yet lost the war. The fighting is not over. We must continue our political efforts to elect to the Congress of the United States and to the Governor's office of Tennessee, those whose principles and philosophy most nearly approach our own. This can best be done through organization and this can only be built by dollars.

I therefore urge each member of TMA to join AMPAC and IMPACT in 1966, either through its representative in your district or by sending your check made to IMPACT for \$25 or to your local medical society with a sure knowledge that it will be forwarded to the proper place. Only if we support the organizations formed to support our beliefs do we have any right to expect or hope to preserve them in a land where the trend of things seems to be going the other way.

President

# THE JOURNAL

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(Specialty Society Representatives to be named)

FEBRUARY, 1966

## EDITORIAL

### AMA JOINS IN THE ATTACK ON V.D.

On November 20, last, the *American Medical Association's* Committee on Environmental and Public Health sponsored a National Symposium on Venereal Disease Control in collaboration with the *U. S. Public Health Service (HEW)* and the *American Social Health Association*. About 150 persons were invited to attend—health officers, representatives of state medical societies and of other professional associations. Some dozen papers by authorities in venereal disease control described the several areas of attack upon the problem—epidemiology, diagnosis, and treatment.

The AMA is in a strong position to support the two agencies with which this Symposium was held. Venereal diseases cannot be controlled, leave alone eradicated, without the full collaboration of the medical profession. Dr. William Brown, Chief of the Venereal Disease Branch of the USPHS, is powerless in the attack of which he and his

staff are the spearhead without the practitioner's recognition of his responsibility in reporting and in aiding in contact investigation. So too, the *American Social Health Association*, which has for decades been in the business of educating the public about venereal disease, can be assisted immeasurably by the support of a powerful professional organization such as the AMA.\*

I wrote recently, "Though many patterns of disease have been altered in the past half-century because of factors in epidemiology and treatment, syphilis has remained unchanged."

I say this from the vantage point of long interest in the *Treponema pallidum* and its ceaseless workings to rupture social bonds, and to scar vital tissues and structures. Introduced to it first as a medical student, on wards set aside for the treatment of the infected—a backwash of the crusade against the *social diseases* begun by Josephus Daniels, Secretary of the Navy in World War I—arsphenamine and mercury rubs for *T. pallidum*, mercurochrome, potassium permanganate and silver salts for the gonococcus. Then for over a decade after this skirmish the profession and the public drowsed. The story goes that in 1936, the Surgeon General of the USPHS, Thomas Parran, mentioned the word *syphilis* on a radio broadcast—the first time the word had been used in any news media. A furor arose! Parran subsequently said, "Nice people don't have it! Nice people don't talk about it! Nice people don't do anything about it." He did something about it—and with a vengeance. His attack began in 1937 and within the next decade were established and sharpened all the weapons to use in battle:—naming the "social diseases" for what they are and telling how they are spread; the establishment of epidemiologic techniques and demonstrating their practicality; the demonstration that adequate treatment is effective; that there is need for education of the public, need for education of the medical undergraduate and for post-

\*The November-December *PR-Doctor* was devoted to "What's so Delicate About VD?" Also two excellent educational papers have appeared in *Today's Health*:—"Why The Rise in Teen-age VD?" (Sept. 1965), and "Why All The Fuss About Gonorrhea" (Dec. 1965).

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graduate or continuing education of the health officer and practicing physician. At the end of a decade came the universal use of penicillin. Federal appropriations for venereal disease control were reduced, epidemiologic means were curtailed, and fewer and fewer cases were reported to reach a "low" in 1956. After 1958, it became clear that the rate of venereal disease was rising. Surgeon General Luther Terry, in 1961, called together a Task Force to look at the problem—there had been a rise of 130% alone in infectious syphilis in persons under 20 years of age!

Is it not ironical that I and my contemporaries should need to see yet a third war declared on preventable diseases whose mode of spread is well understood and for which there is effective treatment!

It is not necessary here to document the rising frequency of syphilis, but I extend my quotation referred to above:

"It (syphilis) remains a preventable disease; the infectious agent, the *Treponema pallidum* has the same characteristics as in the past; the mode of its transmission is unchanged; the fetus *in utero* of the untreated mother is infected as in the past; and host-parasite relationships remain the same and thus, one may anticipate the same incidence of late disabling or fatal disease as in the past. The only item which is different lies in the area of treatment."<sup>1</sup>

If the physician feels the responsibility which attends the acceptance of an M.D. degree and at the same time carefully reads this simple statement his work is cut out for him.

(1.) Venereal disease is preventable, the organisms are known and there is nothing mysterious about their transmission. *The role of the physician is obvious in aiding to educate the public, in reporting disease and in lending every assistance in epidemiologic investigation.* Homosexuality, a distasteful topic to the average doctor, must be faced realistically. There is an increasing amount of this deviation in the population—these persons are even more promiscuous than those of heterosexual habits. *The doctor must be aware of anal infections, both treponemal and gonococcal.*

(2.) In the untreated mother, especially if syphilis is of two or less years duration, the chances are the fetus will come to an unfortunate end—miscarriage, stillbirth, or

death shortly after birth; or worse, if it lives, with possible handicaps for life. *The doctor's duty?—blood tests early in pregnancy if possible, and again later in pregnancy.*

(3.) If host-parasite relationships remain unchanged the physician need but review his clinical knowledge. He must assume that a positive VDRL means *syphilis until proven otherwise*. He must recall that of *untreated syphilitics some 10% will develop cardiovascular disease, another 10% disease of the central nervous system, and somewhat more, gummatous or late benign syphilis.* (He must be prepared to recognize these in the next decade among the hundreds of thousands of untreated syphilitics accumulating in our population.) He must know that positive serologic tests of long standing *probably will not be reversed by treatment.* He must remember that *untreated syphilis in its early months and even years may relapse with infectiousness and with mucocutaneous lesions.* He must know that *inadequately treated early syphilis is especially prone to such relapse.* He must know that *penicillin-resistant gonococci exist and are of increasing frequency and must act accordingly.*

In closing this editorial two points need to be emphasized, both might be topics for an editorial each.

One is the sad aspect of the teenager's sexual life today.<sup>2</sup> It is not merely looking askance at the younger generation. There are ample statistics upon illegitimate births, and premarital pregnancies, as well as inordinate rises of venereal disease above the incidence among adults, to say nothing of drinking by teenagers, too much leisure time, too much spending money and too many cars, which I have likened to a "combination mobile mixing bar and house of assignation."<sup>3</sup> Irrespective of the whole gamut of sociologic reasons—deficiencies in sex education, changes in mores, breakdown of family ties and responsibilities, etc., the physician must join local health departments, PTA groups and any others who may call upon him to aid in education of the public. He must realize that the teenage problem cuts across all social and religious boundaries!



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Many years ago Parran said, "Syphilis can never be controlled while more than one-half of the cases are not recognized for more than one year after onset." This leads to the second point.

The ease of penicillin therapy moved the treatment of syphilis from the public health or university hospital clinic to the doctor's office. With this move was lost, in the main, reporting and epidemiologic control. Case-finding and followed by treatment are the only means of controlling the infectious pool in a community. I have said before, and say again that the doctor who fails to report venereal disease and who does not aid in contact investigation is assisting in keeping the *T. pallidum* alive in the community.<sup>4</sup> (With well over 100,000 infectious cases of syphilis per year, a survey in 1962 showed that "private physicians are reporting only about 11% of the patients they treat." The minority of cases are seen in public clinics.<sup>5</sup>) The doctor who stands on this attitude is either poorly motivated to the practice of medicine, or has not learned the importance of preventive medicine in this field. If the latter, some blame at least may be placed on the current glaring deficiencies in undergraduate medical education and curricula in facing up to preventable and curable diseases which are uncontrolled only because they thrive clandestinely.<sup>6</sup>

The AMA has thrown its weight behind education of the public and the doctor. Each member of the AMA now must pick up his individual burden in the control of these preventable diseases.

R.H.K.

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## DEATHS

**Dr. Henry B. Turner**, 48, Memphis, died at his home on December 20th.

**Dr. John W. Maddox**, 72, Ardmore, died December 18th at St. Thomas Hospital in Nashville following an extended illness.

**Dr. Glenn D. Grubb**, Knoxville, 60, died at his home on January 1st.

**Dr. Wm. Harrison Lovejoy**, 94, Memphis, died December 26th at Rosewood Convalescent Center.

**Dr. William Campbell McRee**, 83, Trenton, died December 13th after a long illness.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

#### Nominating Committee Named

A nine-man nominating committee to select a slate of officers for the Tennessee Medical Association for 1966 was selected by the Association's Board of Trustees on January 9th. The Nominating Committee will hold its first meeting at the TMA Annual Meeting in Gatlinburg on Sunday, April 17th. At that time a Chairman will be elected. Members of the Committee are: EAST TENNESSEE—Dr. John H. Saffold, Knoxville; Dr. John M. Higgason, Chattanooga; and Dr. Harmon Monroe, Erwin. MIDDLE TENNESSEE—Dr. Chas. C. Trabue, Nashville; Dr. John O. Williams, Mt. Pleasant; and Dr. Charles Petty, Clarksville. WEST TENNESSEE—Dr. Harold B. Boyd, Memphis; Dr. Charles N. Hickman, Bells; and Dr. Arthur C. Dunlap, Paris.

Any county medical society desiring to place the name of a physician in nomination for an office of the TMA is requested to contact its representatives on the Committee.

#### Memphis-Shelby County Medical Society

The Society met in regular session in the auditorium of the Institute of Pathology on January 4th. The Prepaid Insurance Committee of the Society presented a panel discussion on "The Memphis Plan," a prepaid insurance plan formulated and approved by the House of Delegates of the Shelby County Society. The fee schedule is based on the usual and customary fee of physicians in the Memphis area.

*when treatment  
might precipitate  
a problem  
with monilia  
especially in  
diabetics or  
debilitated  
patients*

*with  
the option  
of  
b.i.d.  
dosage*

and in diabetics — patients with a history of fungal overgrowth — patients on steroids who require antibiotics. The antimonilial specificity of Nystatin plus the extra benefits of DECLOMYCIN Demethylchlortetracycline allow lower mg intake per dose per day, the option of b.i.d. dosage, higher activity levels, 1-2 days' "extra" activity.

*Side Effects* typical of tetracyclines include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis, dermatitis, overgrowth of nonsusceptible organisms, tooth discoloration (if given during tooth formation) and increased intracranial pressure (in young infants). Also, very rarely, anaphylactoid reaction. Reduce dosage in impaired renal function. Because of reactions to artificial or natural sunlight (even from short exposure and at low dosage), patient should be warned to avoid direct exposure. Stop drug immediately at the first sign of adverse reaction. It should not be taken with high calcium drugs or food; and should not be taken less than one hour before, or two hours after meals.

*Average Adult Daily Dosage:* four divided doses of 1 capsule each or two divided doses of 2 capsules.

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and Nystatin 250,000 units/CAPSULES LEDERLE



## Consolidated Medical Assembly of West Tennessee

Members of the West Tennessee Consolidated Medical Assembly entertained their wives at a Holiday Buffet on December 7th in the Gold Room of the Southern Hotel in Jackson.

A brief business meeting was held in conjunction with the occasion and the following officers were elected to serve in 1966. Dr. Charles N. Hickman of Bells was named President of the Society and Dr. James L. Thomas was re-elected Secretary.

## Chattanooga-Hamilton County Medical Society

The Chattanooga-Hamilton County Medical Society met on February 1st in the auditorium of the Interstate Building. The scientific program included a presentation by Dr. L. Spires Whitaker entitled, "Tuberculosis in Chattanooga Today." Dr. David P. Hall presented a paper entitled, "Diagnostic Mediastinoscopy."

## Knoxville Academy of Medicine

The scientific program entitled "Changing Concepts in Management of Massive Deep Phlebitis" was presented by Dr. Mark P. Fecher at the meeting of the Academy on January 11th. The meeting was held in the Academy of Medicine Building.

## NATIONAL NEWS

### The Month in Washington

(From the Washington Office, AMA)

The staff of the Senate antitrust subcommittee has been investigating the rise in quinine prices. The investigation resulted from receipt by members of Congress of complaints from constituents. Many of the complaints reported a sharp rise in the price of quinidine, a quinine derivative prescribed for irregular heart beats. The

Pharmaceutical Manufacturers Association attributed the price rise to a combination of decreased supplies and rising demands. A spokesman for the association said that it had become increasingly difficult to obtain quinine's raw material, the bark of the Cinchona tree. He said that Indonesia, once the principal supplier, had virtually cut off its exports of the cinchona bark to the Western World.

Other suppliers, he said, include the Congo and some South American countries. He said these sources were seriously limited, but that the shortage was not expected to reach critical proportions. The PMA spokesman attributed the rising demand to the appearance of new strains of malaria that are resistant to synthetic drugs developed during World War II as quinine substitutes. This has caused demands for natural quinine to rise sharply in such malaria-infested areas as Viet Nam.



A panel of leading businessmen has warned of the dangers of relying too heavily on government for administration of health and retirement plans. Such government programs should be used to help the sick, disabled and aged, the panel said, "only if voluntary and private means—truly and tested—cannot adequately meet society's needs. . . . Heavy reliance on government can discourage the experimentation and innovation needed to solve our health and retirement problems. Such reliance also can narrow the freedom of choice of people who prefer to meet their needs in their own ways."

This statement was a highlight of a 263-page report by the Task Force on Economic Growth and Opportunity, which was an independent group set up under the sponsorship of the U. S. Chamber of Commerce. The report was entitled "Poverty: The Sick, Disabled and Aged."

The report cited medicare as an example, as follows:

"In an attempt to help low income aged people obtain health care at little personal cost, medicare was attached to the tradition-bound Social Security program. As a result, medicare will help millions of Amer-

**to help relieve pain  
in common  
anorectal disorders**

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Diothane—with its chemically distinct "non-caine" anesthetic agent diperodon—provides effective temporary topical anesthetic and emollient actions for soothing relief of anorectal pain. Anesthetic activity is effective and relatively prolonged; sensitization is infrequent. Reports to Merrell on 1,500 patients treated pre- and postoperatively with Diothane Ointment, indicate only 22 developed local skin reactions. Reactions to Diothane have been burning or stinging sensations and a few cases of allergic manifestations. An additional advantage: Diothane Ointment and Suppositories are mildly antiseptic. Prescribe or recommend either form...both are now available.

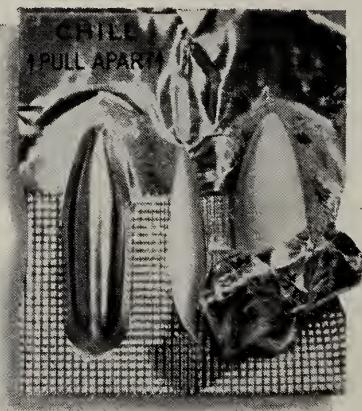
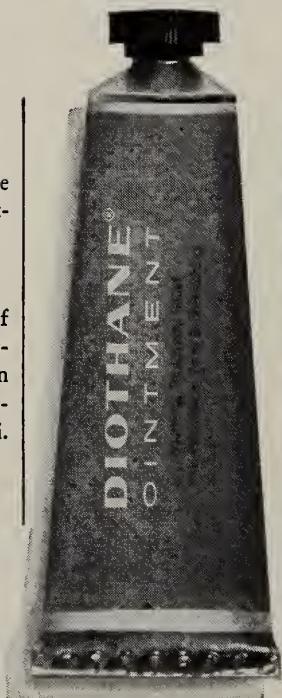
#### **DIOTHANE OINTMENT**

##### **COMPOSITION:**

diperodon 1.0%; oxyquinoline benzoate 0.1% in a special ointment base.

##### **INDICATIONS:**

Provides temporary palliation of pain that may result from hemorrhoidectomy and from common anorectal disorders such as hemorrhoids, anal fissures, pruritus ani.



#### **DIOTHANE SUPPOSITORIES**

##### **COMPOSITION:**

Each suppository, weighing approximately 2.6 Gm., contains diperodon 1.0%; urea 10.0%; oxyquinoline benzoate 0.1% in a special hydrophilic suppository base. A unique shape keeps the suppository in intimate contact with mucous membranes.

##### **INDICATIONS:**

Provide for temporary palliation of pain caused by hemorrhoids and pruritus ani.

**Merrell**

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icans who are not needy by any stretch of the imagination.

"It will be financed by the Social Security payroll tax, a highly regressive tax that places heaviest burdens, in relation to income, on low income workers and on low income consumers who pay higher prices to absorb the cost of payroll taxes levied on employers."



Measles incidence in 1965 was the lowest in recent years, according to the Public Health Service's Communicable Disease Center. Through the first 49 weeks of the year, 256,443 cases were reported, far below the average of more than 400,000 annual cases since 1960. There were 478,518 cases in the first 49 weeks of 1964.

But PHS warned that, if past experience is repeated, major epidemics can be expected in many sections of the country during the first half of 1966.



The federal government is going to spend more on health and education programs in 1966—but not as much as originally expected, principally because of the Viet Nam war.

HEW Secretary John W. Gardner says 1966 would not be a "slowdown year" in his department because of the start of new programs in elementary and secondary education, medicare, water pollution, disease control and other areas.

But, he added, a certain slackening in other programs might be useful. He declined to identify specific projects. He said, however, that they "might be done better if they are started slowly."

doctors could give a clearer, more complete clinical picture of a patient by using a reporting format that is second nature to most physicians. As a result, the Disability Program has introduced nationwide a form designed to provide ample space and an effective format for detailing the patient's history, physical and laboratory findings.

These developments were announced by Dr. Jas. C. Gardner, Administrative Medical Consultant of the Tennessee Division of Vocational Rehabilitation whose Disability Determination Section is the State Agency that makes determinations for the Social Security Program locally. Dr. Gardner is Chairman of TMA's Committee on Rehabilitation.

"Inasmuch as the treating physician can usually provide most, if not all, the medical evidence we need for determining whether the patient is disabled," said Dr. Gardner, "this format and space should be a help to the doctor in transcribing those parts of the patient's chart pertinent to his impairment. When the attending physician reports the data that the reviewing physician needs to evaluate remaining capacity for work, he is helping his patient receive prompt, sound handling of the disability claim."

If additional data is needed for an evaluation, the reviewing physician at the State Agency may call the patient's physician or the Agency may write for the information. Experience shows that such phone calls generally take only a few minutes.

In states where this procedure has been used, reporting doctors volunteered that, whenever possible, they prefer such calls to letters of inquiry. Also, doctors said, they welcome the chance to discuss the case with their colleagues at the State Agency.

## MEDICAL NEWS IN TENNESSEE

### Social Security Changes Medical Report Form

Physician's preferences have led the Social Security Disability Program to replace the old-style questionnaire form with a special narrative type form that permits a more descriptive report of a patient's condition. Studies in six states demonstrated that

### University of Tennessee College of Medicine

Dr. I. Frank Tullis has been named president of the faculty of the College of Medicine succeeding Dr. James N. Etteldorf. Dr. James W. Fisher was named vice president and Dr. Richard H. Walker, secretary. Appointed to the agenda committee were: Dr. James Beard, Dr. Robert A. Crocker, Dr. Fred E. Hatch, Jr. and Dr. Leo G. Horan. The faculty organization acts as an advisory body to the administration.

now...introducing a new high-strength dosage form

# SIGNEMYCIN

## A 'MAXIMUM SECURITY' ANTIBIOTIC\*

\* THE BROAD RANGE DEPENDABILITY OF TETRACYCLINE

long established as the broad-spectrum agent of first choice in a wide variety of infections

\* WITH THE ADDED SECURITY OF MEDIUM-SPECTRUM REINFORCEMENT

triacytolyandomycin is highly active against the common 'coccal' pathogens, including certain strains of staphylococci resistant to penicillin and tetracycline

\* ESPECIALLY VALUABLE IN U.R.I.

provides decisive therapy in acute respiratory infections and other conditions in which staphylococci, streptococci or mixed flora are frequently encountered

\* NOW AVAILABLE IN NEW STRENGTH FOR NEW CONVENIENCE AND ECONOMY

Signemycin 375—high-potency capsules for simpler administration, greater patient economy

# YCIN® 375

(tetracycline 250 mg.  
triacetyloleandomycin 125 mg.)

**Indications:** Indicated in the therapy of acute severe infections caused by susceptible organisms and primarily by bacteria more sensitive to the combination than to either component alone. In any infection in which the patient can be expected to respond to a single antibiotic, the combination is not recommended. Signemycin should not be used where a bacteriologically more effective or less toxic agent is available. *Triacetyloleandomycin, a constituent of Signemycin, has been associated with deleterious changes in liver function.* See precautions and adverse reactions.

**Contraindications:** Contraindicated in individuals who have shown hypersensitivity to any of its components. Not recommended for prophylaxis or in the management of infectious processes which may require more than 10 days of continuous therapy. If clinical judgement dictates therapy for longer periods, serial monitoring of liver function is recommended. Not recommended for subjects who have shown abnormal liver function tests, or hepatotoxic reactions to triacetyloleandomycin.

**Precautions and Adverse Reactions:** *Triacetyloleandomycin, administered to adults in daily oral doses of 1.0 gm. for 10 or more days, may produce hepatic dysfunction and jaundice. Adults requiring 3 gm. of Signemycin initially should have liver function followed carefully and the dosage should be reduced as promptly as possible to the usual recommended range of 1.0 to 2.0 gm. per day. Present clinical experience indicates that the observed changes in liver*

*function are reversible after discontinuation of the drug.*

Use with caution in lower than usual doses in cases with renal impairment to avoid accumulation of tetracycline and possible liver toxicity. If therapy is prolonged under such circumstances, tetracycline serum levels may be advisable. In long term therapy or with intensive treatment or in known or suspected renal dysfunction, periodic laboratory evaluation of the hematopoietic, renal and hepatic systems should be done. Formation of an apparently harmless calcium complex with tetracycline in any bone forming tissue may occur. Use of tetracycline during tooth development (3rd trimester of pregnancy, infancy and early childhood) may cause discoloration of the teeth. Reversible increased intracranial pressure due to an unknown mechanism has been observed occasionally in infants receiving tetracycline. Glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and definite allergic reactions occur rarely. Severe anaphylactoid reactions have been reported as due to triacetyloleandomycin. Photosensitivity and photoallergic reactions (due to the tetracycline) occur rarely. Medication should be discontinued when evidence of significant adverse side effects or reaction is present. Patients should be carefully observed for evidence of overgrowth of nonsusceptible organisms including fungi, which occurs occasionally, and which indicates this drug should be discontinued and appropriate therapy instituted. Steps should be taken to avoid masking syphilis when treating gonorrhea.



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Dr. John H. Heller, executive director of the New England Institute for Medical Research at Ridgefield, Connecticut, addressed the graduating class of the University of Tennessee Medical Units on December 19th. Dr. Heller's remarks were principally directed to the dangers of over-specialization in medicine.

Dr. Andrew Holt, president of the College, presented the degrees. Recipient of the Charles V. Verstandig Award for overcoming the most obstacles toward obtaining a degree was Dr. John Marvin Roe of Cookeville.



Dr. B. R. Jennings, assistant professor of pathology, is the recipient of a one-year grant in the amount of \$13,250 to finance a study of the effects of radiation and an antibiotic called actinomycin-D on the formation of antibodies. The grant from the Atomic Energy Commission's Medical Research Branch, Division of Biology and Medicine, is subject to annual renewal.

### Vanderbilt University School of Medicine

Dr. James H. Elliott of Wellesley, Mass., has been appointed associate professor of ophthalmology and chief of the division at Vanderbilt University, effective July 1, 1966. Dr. Elliott is associated with the Howe Laboratory of Ophthalmology at the Massachusetts Eye and Ear Infirmary in Boston.

### Vanderbilt-Meharry Cooperative Program

Vanderbilt University School of Medicine and Meharry Medical College have jointly announced a program of cooperation and the appointment of a committee to work toward the strengthening of the cooperative efforts which have existed for years between the two medical schools. Each of the institutions call upon the other for assistance in teaching, surgery, professional consultation in certain departments, and in research. Meharry students have taken part in Vanderbilt's seminars. Thirty-four practicing Nashville physicians have clinical appointments at both medical schools. Five members of Vanderbilt's Board serve on Meharry's Board. Appointed to the Committee were: Dr. Harold D. West, president of Meharry; Dr. Randolph Batson, dean and

director of medical affairs at Vanderbilt's School of Medicine; Dr. Robert S. Anderson, chairman of Meharry's department of medicine; Dr. Axel C. Hansen, head of Meharry's division of ophthalmology; Dr. F. Tremaine Billings, dean of students of Vanderbilt's School of Medicine; and Dr. John L. Shapiro, chairman of Vanderbilt's pathology department.

### Central State Hospital

On January 1, Dr. William H. Tragle assumed the duties of Superintendent of Central State Hospital filling the vacancy which resulted from the recent death of Dr. John M. Wilson.

Dr. Tragle comes to Tennessee from the Alabama Department of Public Health where he has been Director of the division on mental health planning. He has been connected with the University of Alabama Medical Center since 1952.

## PERSONAL NEWS

**Dr. William K. Rogers**, Knoxville, has been named chief of staff at Presbyterian Hospital. **Dr. William H. Gardner** was named vice-chief and **Dr. William E. McGhee**, secretary. **Dr. Joseph R. Garcia, Jr.** was elected chief of the surgical section, with **Dr. Lucian W. Trent** as vice chief and **Dr. Spencer Y. Bell** as secretary. The new chief of the obstetrical-gynecological section is **Dr. John D. Moore, Jr.** Vice chief is Dr. Gardner and secretary, **Dr. George M. Trotter**. **Dr. William G. Laing** was elected chief of the medical section and **Dr. Richard J. Erickson**, secretary.

**Dr. Cecil F. Mynatt** has returned to Knoxville after completing psychiatric residency at Menninger School of Psychiatry in Topeka, Kansas, and is the new clinical director of Eastern State Psychiatric Hospital.

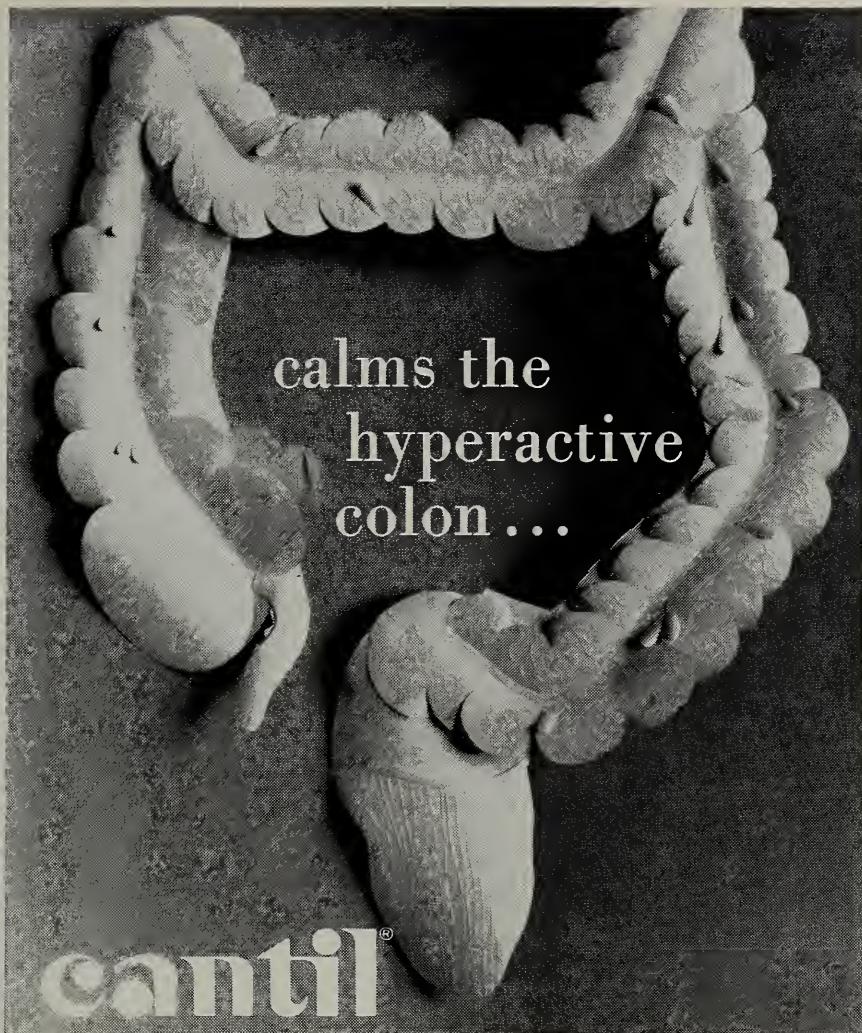
**Dr. J. C. Leonard**, Lewisburg, has been named president of the Marshall County Chamber of Commerce.

**Dr. Charles C. Smeltzer**, a former president of the Knoxville Academy of Medicine, received that organization's highest honor recently when he was presented the Distinguished Service Award.

**Dr. William C. Dowell** is now associated with the Earl Campbell Clinic in Chattanooga.

**Dr. Walter Boehm**, Chattanooga, was guest speaker at a recent meeting of registered physical therapists representing Erlanger, Memorial and TriCounty hospitals, the Siskin Rehabilitation Center and the Chattanooga-Hamilton County Health Department.

**Dr. I. Reid Collman**, Knoxville, has been re-



## *helps restore normal motility and tone*

Cantil (mepenzolate bromide) works in the colon. In irritable colon, spastic colon, ulcerative colitis and other functional and organic colonic disorders, it acts to:

- control diarrhea/constipation
- relieve spasm, cramping, bloating
- make patients more comfortable

with little effect on stomach, bladder or other viscera.

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects. Blurring of vision or dryness of the mouth were occasionally seen and were usually managed with a reduction in dosage. Urinary retention, noted in two cases was eliminated in one by reducing dosage."<sup>1</sup>

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One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withholding glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

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1-Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957



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elected chief of staff of University Hospital. **Dr. W. G. Laing** is the new secretary. Elected to the executive committee are: **Dr. L. W. Trent, Dr. Frank London, Dr. Joe Crumley, Dr. W. G. Byrd, Dr. Robert Lash, Dr. Zelma Herndon, Dr. Glenn Watts, Dr. Gregory Salamone, Dr. Kenneth Hicks, Dr. Daniel Beals and Dr. Forrest Powell.**

**Dr. Charles R. Moore** has completed his service with the U. S. Army Air Corps in Viet Nam and has begun the practice of medicine in McMinn County. He is associated with **Dr. James F. Cleveland** at the Cleveland Clinic in Englewood, and is on the staff of both Woods Memorial Hospital at Etowah and Epperson Hospital in Athens.

**Dr. Tom Weems**, who has just completed a surgery residency at Methodist Hospital in Memphis, began his practice at Lewis County General Hospital on January 3rd.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966

#### State

Feb. 27	State and County Society Officers Conference of the Tennessee Medical Association, Hermitage Hotel, Nashville
April 17-19	Tennessee Medical Association Annual Meeting, Civic Center Auditorium, Gatlinburg

#### Regional

Feb. 28-Mar. 3	Southeastern Surgical Congress, Marriott Motor Hotel, Atlanta
March 3-5	Central Surgical Association, Chicago
March 29-30	Southwestern Pediatric Society, Statler Hilton Hotel, Los Angeles
April 4-8	Spring Congress in Ophthalmology and Otolaryngology, Gill Memorial Hospital, Roanoke, Va.
April 13-16	West Virginia Academy of Ophthalmology and Otolaryngology, Annual Meeting, Greenbrier Hotel, White Sulphur Springs, West Va.
April 18-21	Southwestern Surgical Congress, Flamingo Hotel, Las Vegas

#### National

March 4-9	American Association of Pathologists and Bacteriologists, Statler-Hilton, Cleveland
March 14-17	American College of Surgeons (sectional meeting for doctors and graduate nurses), Sheraton-Cleveland and Statler Hotel, Cleveland

March 23-25

American Surgical Association, Boca Raton Hotel, Boca Raton, Fla.

April 14-19

American Dermatological Association (members only), Homestead Hotel, Hot Springs, Va. American Society of Internal Medicine, Biltmore Hotel, New York

April 15-17

American Otological Society, Americana Hotel, San Juan, P. R.

April 18-19

American College of Physicians, Hilton and Americana Hotels, New York

April 18-22

American Laryngological Association, Americana Hotel, San Juan, P. R.

April 23-24

American College of Allergists, Palmer House, Chicago

April 25-30

American Academy of Neurology, Bellevue-Stratford Hotel, Philadelphia

April 27-29

American Pediatric Society, Inc. Seaside Hotel & Steel Pier, Atlantic City, N. J.

April 27-30

American Association of Plastic Surgeons, Sheraton-Cleveland, Cleveland

May 1-5

American College of Obstetricians and Gynecologists, Palmer House, Chicago

May 7-8

American Academy of General Practice—State Officers Conference, Muehlebach Hotel, Kansas City

May 9-13

American Psychiatric Association, The Traymore, Atlantic City, New Jersey

May 22-25

American Thoracic Society, Hilton Hotel, San Francisco

May 22-26

American Orthopaedic Association, Broadmoor Hotel, Colorado Springs, Colo.

May 26-28

American Gastroenterological Association, Drake Hotel, Chicago

May 30-June 1

American Ophthalmological Society (members only), The Greenbrier, White Sulphur Springs, West Va.

May 30-June 2

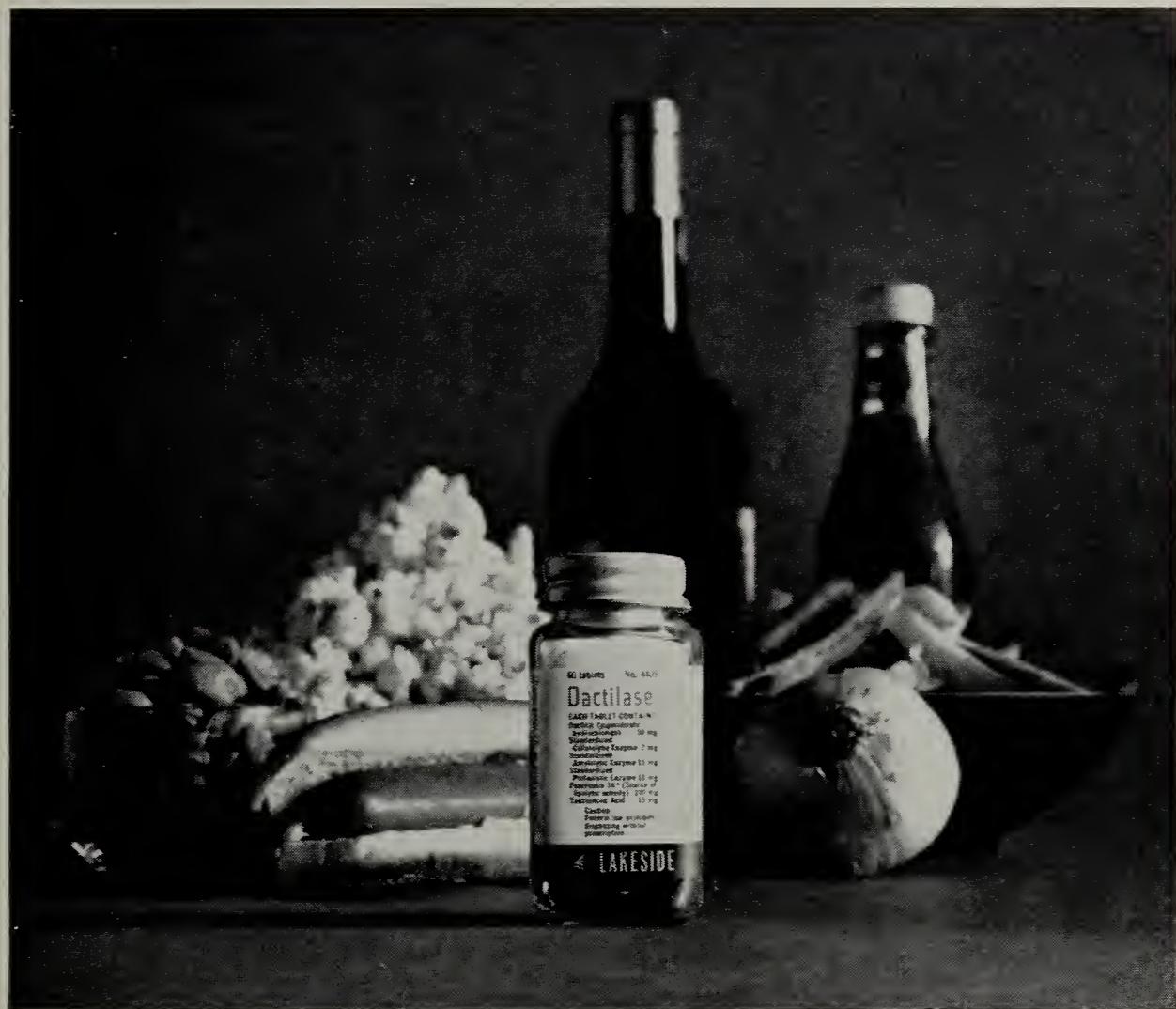
American Urological Association, Palmer House, Chicago

### American College of Physicians Postgraduate Courses in 1966

The following postgraduate courses of the American College of Physicians will be presented in 1966:

Feb. 21-25

"Cancer," Presbyterian-St. Luke's Hospital, Chicago, Ill.



**more complete relief for the "dyspeptic"**

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\*Need in human nutrition not established. \*\*As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.

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Mar. 7-11	"The Big Heart," Cardiac Work and Cardiac Hypertrophy: Clinical Appraisals, Therapeutic Considerations and Pathologic Correlations, Baylor University College of Medicine, Houston, Texas	May 9-13	Society, Barbizon-Plaza Hotel, New York, N. Y.
Mar. 28	"Basic Mechanisms in Internal Medicine," University of Toronto, Toronto, Ontario, Canada	May 16-20	"Internal Medicine in Light of Recent Developments," Pennsylvania Hospital, Philadelphia
April 1		June 13-17	"Physiological Aspects of Cardiopulmonary Disease," Indiana University, Indianapolis
April 14-16	"Current Concepts of Renal, Gastrointestinal and Circulation Physiology" co-sponsored by the American Physiological	June 15-18	"Advanced Psychiatry for Internists," Baltimore Psychoanalytic Institute, Baltimore, Md.
			"Neurology for the Internist," Bowman Gray School of Medicine, Winston-Salem, N. C.

# Hill Crest HOSPITAL

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tients are accepted and departmentalized care is provided according to sex and the degree of illness.

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**CLINICAL DIRECTORS:**  
James K. Ward, M.D., F.A.P.A.  
Hardin M. Ritchey, M.D., F.A.P.A.

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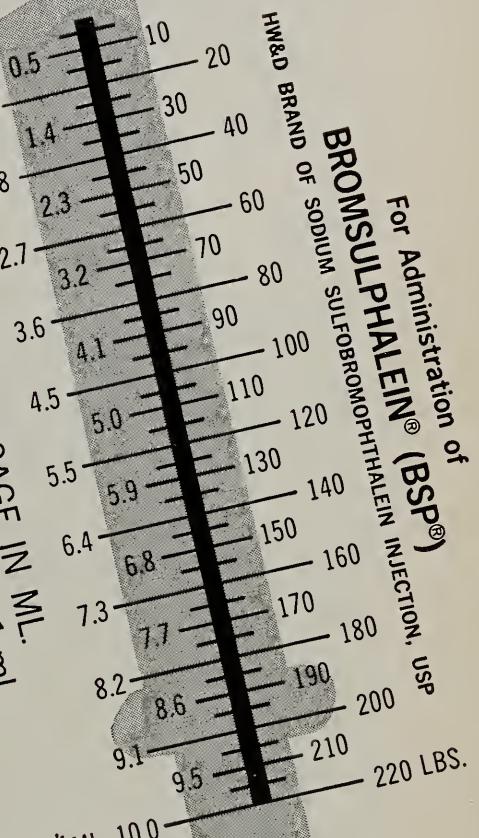
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## Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville 12, Tennessee.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

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The authors record their results of a double-blind study with the use of these drugs as medication preliminary to operation.

## A Comparison of Meperidine and Propiomazine Hydrochloride When Employed to Produce Quietude During Regional Anesthesia\*

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During regional anesthesia, the average patient requires some degree of sedation or alleviation of apprehension. A large number of agents—tranquilizers, hypnotics, sedatives and narcotics—currently are being proposed for this purpose. This study was undertaken to compare two such agents with a placebo. Meperidine (Demerol) and propiomazine hydrochloride (Largon†) were used in adult candidates for elective operative procedures conducted under regional anesthesia. The purpose of the study was to determine whether a drug could produce quietude and abolish apprehension in absence of a notable effect on the level of awareness, blood pressure, respiration and pulse. Many anesthesiologists commonly employ meperidine which is a synthetic analgesic. This drug has become quite popular for purposes of preoperative medication because it potentiates barbiturates, has a hypnotic effect, raises the pain threshold and has a distinct spasmolytic action on the smooth muscle of the gastrointestinal tract, uterus, bronchial tree, and urinary bladder. Unfortunately, the administration of meperidine in clinical dosage often may produce circulatory and/or respiratory depression. Mild to moderate or even marked sedation also may occur.

Marked postural hypotension has been noted following the routine use of meperidine for preliminary medication.

Recently, another phenothiazine derivative, propiomazine Hcl. (Largon) whose chemical name is (10)2-dimethyl aminopropyl penothiazin-2-Y1)-1 propanone hydrochloride has been advocated for use in preliminary medication for its hypnotic and sedative effect. This agent allegedly has a shorter duration of action than other comparable agents, produces less effect on the central nervous system and less depression of blood pressure and respiratory activity than do other phenothiazine compounds. The drug also allegedly has an antiemetic action but does enhance the depression of the central nervous system produced by the barbiturates, analgesics and anesthetics.

### Technics, Method and Procedure

One hundred and fifty candidates, unselected except for the fact that they were to have elective operative procedures to be carried out under spinal anesthesia, were included in the group. The patients ranged in age from 20 to 90 years (Table 1).

Table I

Age in Years	Number of Patients		
	Control	Propiomazine	Meperidine
10-20	1	3	1
21-30	1	7	8
31-40	6	4	6
41-50	7	2	8
51-60	8	4	3
61-70	15	13	11
71-80	12	11	5
81-90	0	1	0

\*From the Departments of Anesthesiology, the Baroness Erlanger Hospital, Chattanooga, and the University of Tennessee Medical Units, Memphis, Tenn.

†Largon supplied by the Medical Department, Wyeth Laboratories.

No preliminary medication was given prior to taking the patient to the operating room. When the patient arrived in the operating room blood pressure, pulse and respiratory rates were determined before induction of tetracaine anesthesia by the hyperbaric technic. The dosages ranged from 4 to 16 mg. After an interval of twenty minutes following induction of anesthesia (for stabilization of the level of regional anesthesia and the blood pressure), one of the test drugs was administered intravenously. If hypotension developed following the administration of the spinal anesthetic, the patient was not included in the study.

The patient's level of awareness, blood pressure, respiratory and pulse rates, were noted both before induction of anesthesia, after induction of anesthesia but before the administration of the test drugs, and following termination of the anesthetic. All evaluations were carried out by the resident giving the anesthetic and who was unaware of the contents of the ampule which he had injected. All data was recorded on a study form.

These drugs were supplied by the Department of Clinical Investigation, Wyeth Laboratories, and were labelled either A, D, or E. All the solutions were tinted the same color to match that of the propiomazine (Largon) solution. The contents of the 1 ml. ampule was mixed with 5 ml. of normal saline solution and administered intravenously at the rate of 0.5 ml. per second. One lot of ampules contained 50 mg. of meperidine, a second lot 20 mg. of propiomazine, and a third lot 1 ml. of normal saline solution.

The manufacturer (Wyeth Laboratories) did not furnish the key to the contents of

the ampules until the results had been tabulated and the conclusions drawn.

### Results

The operations done upon the patients in this study are shown in table 2. There were

Table 2

OPERATIVE PROCEDURE	
Transurethral resection of prostate	65
Other urologic operations	30
Gynecologic	8
General surgical	45
Orthopedic	6

54 patients in Group D (given saline), 53 in Group A (given propiomazine), and 44 patients in Group E (given meperidine). From the standpoint of the level of awareness, it was noted that the placebo had very little effect. The sensorium of all patients for the entire duration of the operative procedure, after the administration of medication, remained essentially unchanged. The level of awareness was altered in the direction of the sedation and hypnosis in all of the patients who received propiomazine and meperidine, but no loss of consciousness (Table 3).

*Effect on the Blood Pressure.* After the administration of propiomazine, a minimal effect was noted on the blood pressure (the fall in pressure did not exceed 20 mm. of Hg. systolic) in 28 of the 54 patients who received this compound. In 18 patients of the series the blood pressure fell more than 20 mm. of Hg.—between 20 and 40 mm. systolic. In 7 patients the fall was greater than 40 mm. of Hg. systolic.

Of the 54 patients who received the placebo, three-fourths had falls in blood pressure, 8 patients had essentially no change and in 6 there was a slight increase. Twenty-

Table 3  
LEVEL OF AWARENESS

Level of Awareness	Before Anesthesia				During Block				During Operation after Medication		
	Control	Prop.	Meper.	Control	Prop.	Meper.	Control	Prop.	Meper.	Control	Prop.
Apprehensive											
Severe	1	5	1	5	6	6	1	1	0		
Moderate	11	9	17	11	11	17	6	4	1		
Mild	15	14	10	13	12	10	6	3	6		
Attentive but not apprehensive	26	26	15	23	22	11	22	17	2		
Sedated											
Slightly	1	0	1	1	0	1	9	7	17		
Moderately—arouses easily	0	0	0	0	0	0	7	14	19		
Marked—arouses with difficulty	0	0	0	0	0	0	0	4	0		

Prop. = propiomazine

Meper. = meperidine

ty patients experienced falls of between 0 and 20 mm. of Hg.; 7 had drops of between 20 and 40 mm. and 13 greater than 40 mm. In the meperidine series, 7 patients experienced no change or a rise in blood pressure, and 14 showed a fall between 0 and 20 mm. of Hg., 16 between 20 and 40 mm., and 7 over 40 mm. of Hg. A vasopressor was required in 4 patients in the control series, in 5 in the propiomazine series and in 6 in the meperidine series (table 4).

One patient in the meperidine group developed a transient spasm with blanching of the color of the skin along the blood vessel proximal to the point of injection of the solution. This spasm resolved within five to ten minutes and there was no residual effects of any other kind.

The placebo produced a greater decrease in respiratory rate than either the propiomazine or the meperidine. Patients receiving the placebo were observed to show

Table 4  
VARIATIONS IN VITAL SIGNS AFTER MEDICATION

	Blood Pressure			Respiratory Rate			Pulse Rate		
	Control	Prop.	Meper.	Control	Prop.	Meper.	Control	Prop.	Meper.
Increase	6	6	3	6	13	4(9%)	12	7	6
No Change	8	9	4	34	34	28(64%)	10	22	14
Decrease				14(25%)	6(10%)	12(27%)			
0-10 mm. Hg.	10	>35%	6>24%	8>32%					
11-20 mm. Hg.	10		7>24%	6>32%					
21-30 mm. Hg.	5		9>34%	13>36%					
31-40 mm. Hg.	2	>12%	9>34%	3>36%					
40+ mm. Hg.	13	—23%	7—13%	7—15%					
Pressor Used	4	5	6						

**Effect on Respiratory Rate.** In the 53 patients who received propiomazine, no change in respiratory rate was recorded in 34. An increase in rate was noted in 13, while 6 (10%) were observed to have a decrease in rate. Of the 54 patients who received the placebo, no change in rate was observed in 34, an increase in 6 and a decrease in 14 (25%). Of the 44 who received meperidine, the respiratory rate was unchanged in 28, decreased in 12 (27%) and increased in 4. (Table 4.)

**Effect on Pulse Rate.** Of patients who received propiomazine, 22 had no change in pulse rate, 24 had a decrease in rate, and 7 experienced an increase. In the placebo group there was no change in 10 of the 54, an increase in rate in 12, and a decrease in rate in 32. In the meperidine group, 24 of the 44 had a decrease in rate, 14 had no change, and 6 an increase in rate. (Table 4.)

**Miscellaneous Effects.** During the interval of observation of the patient—from the time of injection of the agent until the termination of the operation—nausea occurred in 3 patients who had received the control injection, one who had received propiomazine, and 2 who had received meperidine. There were no specific drug reactions in patients in the placebo or propiomazine group.

a greater number of decreases in pulse rate than patients receiving either the meperidine or propiomazine. The most noticeable action on the pulse rate was noted in the "no change" column. The control produced less change in the pulse rate and in fewer patients was noted following the use of either of the active compounds. A large percentage of patients who received meperidine were sedated. Of the patients sedated following propiomazine, however, there tended to be deeper degrees of sedation. The number sedated with the propiomazine very closely approximated the number sedated following the use of meperidine.

### Discussion

Patients who come to the operating room as candidates for spinal anesthesia frequently are very apprehensive in spite of the preliminary medication they have received.

Most of the patients receive meperidine, a synthetic analgesic and a mild sedative. This usually ceases to be effective after an hour or two, and the patients become restless and anxious; therefore, propiomazine was selected as a drug to allay these undesirable reactions during operations under regional anesthesia. Propiomazine is a synthetic compound and is also a sedative,

hypnotic, and has an antiemetic effect. Propiomazine Hcl. and meperidine were compared in this study and the results were gratifying. The propiomazine produced a quick sedative and hypnotic effect, but also the antiemetic effect was noted. Meperidine produced a sedative action also, but not as rapidly as the propiomazine nor as profound. Some hypotension was noted during the procedures, but in the majority of the patients the hypotension was present before injection of the drug under evaluation.

#### Summary and Conclusions

A double-blind study was carried out using meperidine, propiomazine hydrochloride and a placebo control for medication to produce quietude during operations under hyperbaric spinal anesthesia. Pertinent data has been summated on study sheets. Propiomazine and meperidine appear to be

quite similar in regard to their ability to produce sedation and hypnosis. Both attenuated the level of awareness to the point of producing sonorus sleep in some of the patients and moderate to marked hypnosis in most. Propiomazine produced less hypotension than meperidine. It had less of a depressant effect on the respiratory rate than either meperidine or the control.

On the basis of this study, we conclude the meperidine and propiomazine are comparable when employed to produce quietude during operations in candidates for operations under spinal anesthesia. However, there appeared to be a slightly lower incidence in nausea and hypotension following the use of propiomazine than following the use of meperidine or the control. As one might expect, the control appeared to produce very little effect on sedation.

\* \* \*

#### The Objective Efficacy of Prayer: A Double-blind Clinical Trial. Joyce, C. R. B. and Welldon, R. M. C. J. Chron. Dis. 18:367, 1965.

Eighty years ago, Sir Francis Galton observed that the efficacy of prayer is a matter that could be assessed by properly arranged observation. Lately this has been done. Joyce and Welldon have examined the objective efficacy of prayer in an impressive double blind clinical trial. They reached no decision, probably because of a faulty analysis and the old pitfall of statistical analysis too few trials. Nevertheless Galton would have been pleased and we can expect new and more extensive trials.

Joyce and Welldon disagreed in the beginning in their own views on the efficacy of prayer, one agreeing with Galton that it probably doesn't work and one confident that it does. This may be as close as we can ever come to a triple blind experiment in which not only the subjects were unaware of the treatment but the experimenters were evenly divided on the hypothesis. Galton based his conclusions, in 1883, on an analysis of longevity among sovereigns. Since they might be considered much prayed for, they should have been long lived and yet Galton found they were not. The clerics and the medics have generally disagreed on the healing merits of prayer or, as some would say, "paranormal healing." Both professions have agreed that the matter is and should be properly answered by statistical inquiry. While it may not be possible to objectively evaluate subjective prayer the effect of intercessionary prayer is susceptible to analysis unless we suppose that God being displeased with an examination might with-

draw his divine support in the face of such effrontery.

The investigators selected 48 patients from the clinics of London Hospital for study. The patients were suffering from stationary or deteriorating psychiatric or rheumatic disease. They were all examined for their clinical status by one of the panel of four physicians, none of these knowing the "treatment" assignment of the patient. The patients were then matched in pairs by sex, age and diagnosis and 19 satisfactory pairs were obtained. One patient of each pair was randomly assigned to "treatment." The patients did not know the trial was underway nor the nature of the treatment. After 6 to 12 months the patients were re-evaluated by the same panel of physicians.

The treatment was intercessionary prayer solicited from 6 prayer groups remote from the London area and unknown to either the patients or the evaluating doctors. Members of the prayer groups were given brief descriptions of the person and illness of the patient involved. A total of 19 individuals were involved in the intercessionary praying, 2 praying alone and the others in 4 groups. Most prayers involved 15 minutes per day of prayer for each intercessionist amounting over the 6 month period to at least 15 hours of prayer per patient.

The change of clinical status for each person was compared with that of the matched partner-patient. The difficulty came in the analysis. The authors chose to use a sequential analysis, a technic developed for the needs of production line control in mass production factories. This requires

(Continued on page 244)

The author believes the use of this drug by the route of inhalation may be effective without side effects.

# The Value And Safety Of Nebulized Aminophylline In Acute Bronchial Asthma\*

GLENN E. HORTON, M.D.,† Memphis, Tenn.

Acute dyspnea, whatever the basis may be, is a medical emergency, particularly when persistent and not responsive to the usual forms of therapy. As Herrmann<sup>1</sup> pointed out in 1930, "Any preparation which will relieve the acute respiratory distress under such conditions fairly regularly, promptly, and with reasonable safety deserves careful consideration."

To aid in meeting this problem and at the same time fulfill these conditions, I propose the use of nebulized aminophylline and specifically in the acute dyspnea associated with allergic asthma.

The first report of the successful treatment of status asthmaticus by intravenous theophylline ethylenediamine (aminophylline, USP) was published by Herrmann and Aynesworth<sup>1</sup> with 16 clinical cases of status asthmaticus responding to aminophylline administration intravenously in doses of 0.48 Gm. in 10 ml. of saline solution. Particularly interesting was their observation that in epinephrine-fast cases, aminophylline seemed to restore therapeutic response to the latter.

Prior to this, the reliability of aminophylline in relieving cardiac asthma was well established in the 1930's. Derbes and Engelhardt<sup>2</sup> in 1946, pointed out that aminophylline given intravenously for bronchial asthma had proven not only definitely beneficial, but at times lifesaving. Actually, Efron<sup>3</sup>, had pointed out in 1936 the possible effectiveness of aminophylline as a therapeutic agent in bronchial asthma. Derbes and Engelhardt also mentioned that the clinical effectiveness of aminophylline had been determined before the pharmacologic and physiologic reasons for its effectiveness were known.

\*Presented at the Twenty-first Annual Congress, The American College of Allergists, April 7-9, 1965, Las Vegas, Nevada.

†From the Department of Medicine, University of Tennessee College of Medicine, and Baptist Memorial Hospital, Memphis, Tennessee.

The pharmacologic effect of aminophylline apparently is multiple during treatment of an acute bronchial asthmatic attack. Beckman<sup>4</sup> points out that theophylline can be shown under experimental conditions in the laboratory to be a relaxant of smooth muscle, and in general this would include the smooth muscles of bronchioles which are spasmodically contracted in an asthmatic attack. Aminophylline solution *in vitro* has demonstrated a property of smooth muscle relaxing when applied to suspended bronchi of the puppy dog.<sup>5</sup> Local vasodilatation has been demonstrated in the perfused lungs and a fall in pulmonary arterial pressure was observed in 1958 by Quimby<sup>6</sup> when the drug was given intravenously to anesthetized dogs. Whatever the multiple pharmacologic effects are, aminophylline does have a demonstrated favorable effect clinically and also objectively on pulmonary function studies in the asthmatic patient.<sup>7</sup>

Another mode of administration of aminophylline (other than intravenous, rectal, or oral) is through nebulization. The use of a nebulized aerosol of aminophylline has been reported very infrequently in the literature. In the American Literature, this is reported by Prigal and associates<sup>8</sup> in 1947 and cited by Koelschle.<sup>9</sup> In the foreign literature very little is known, but there is a report in the Russian Literature by Kramarenko,<sup>10</sup> in 1961, on the use of nebulized aminophylline (Euphyllin) in the treatment of bronchial asthma. Beckman<sup>4</sup> points out that aminophylline could be used through nebulization if the patient were unable to tolerate it otherwise.

## Use of Nebulized Aminophylline

The occasion recently arose to employ aminophylline in a patient who not only had severe bronchial asthma but also had hypertension and glaucoma. Aminophylline intravenously relieved the attack in this woman, but produced considerable vomit-

ing and other side effects; the results of administration by the rectal route was unpredictable. On the basis of this, the vial of aminophylline prepared for intravenous administration was placed in a nebulization bowl and attached by a rubber hose to a motor-driven air pump.\* Aminophylline was thus administered to the patient as an aerosol, the patient inhaling deeply following full expiration. She allowed for a full inspiratory pause between each respiratory circle and the procedure was carried out for approximately 20 minutes. At the end of 20 minutes she claimed that her dyspnea was relieved. Pulmonary function studies confirmed this objectively (Fig. 1.).

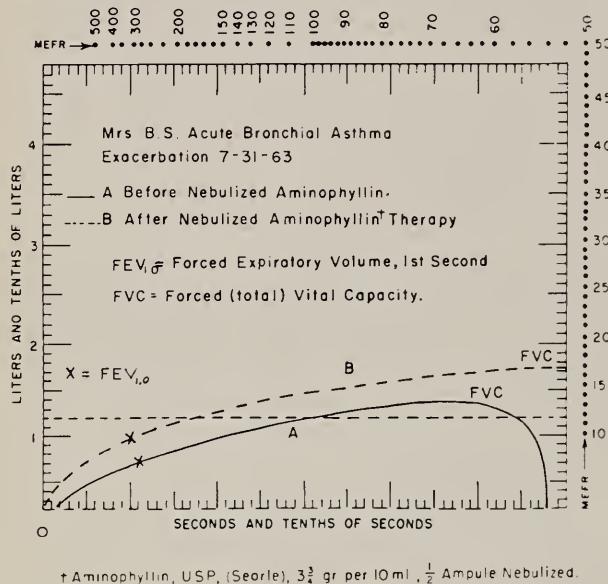


FIG. 1.

On the basis of this experience, I have

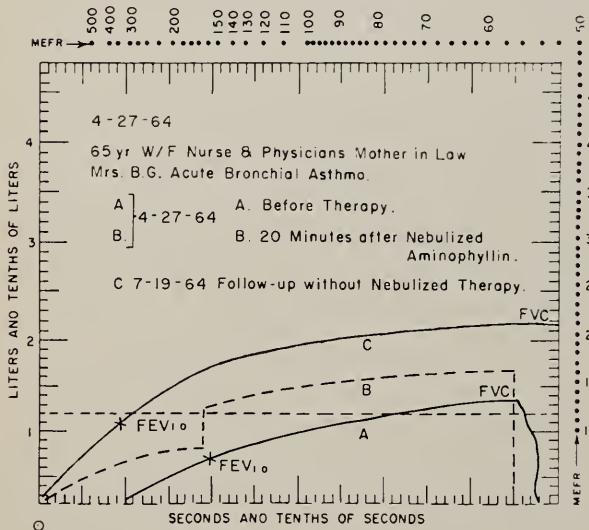


FIG. 2.

administered nebulized aminophylline to additional patients (Figs. 2-8). The amino-

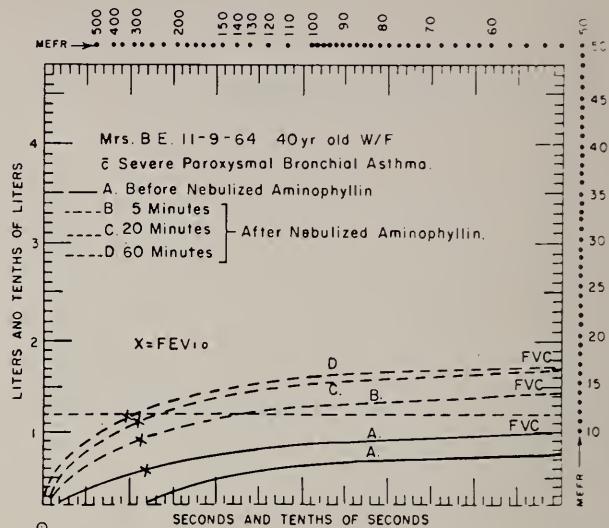


FIG. 3.

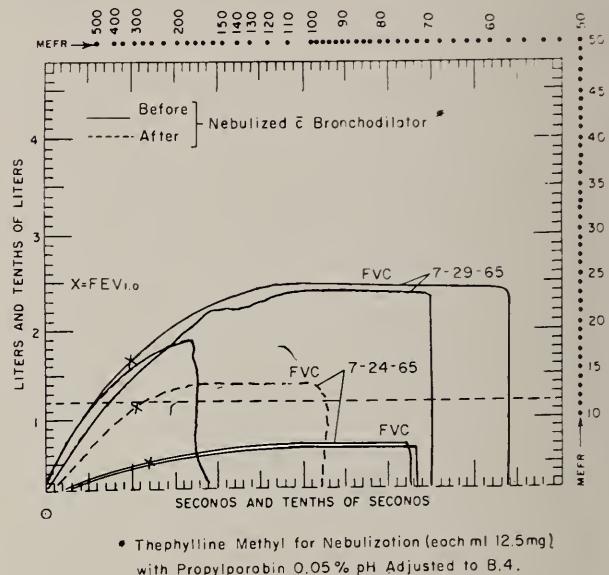
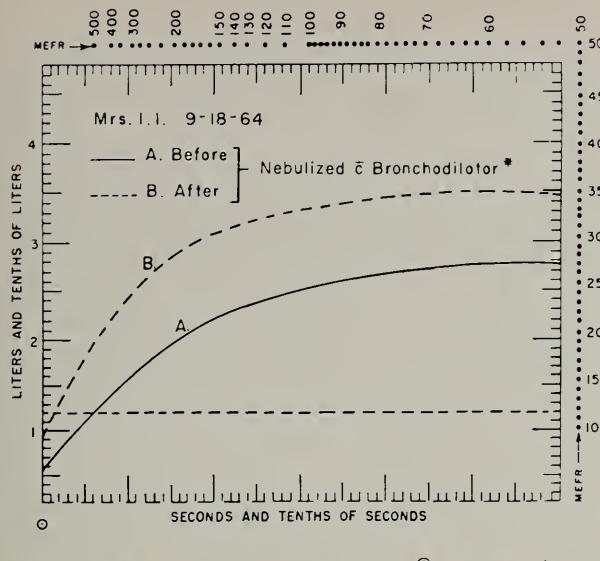


FIG. 4.

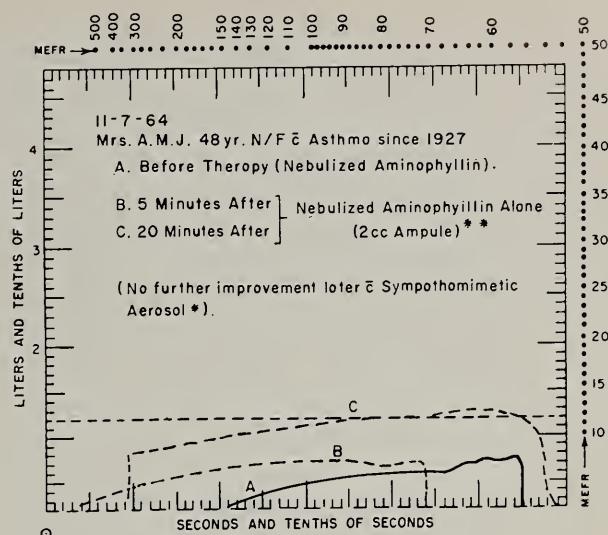
phylline or related compound was used alone and also with various sympathomimetic preparations such as 1-200 Isoproterenol and other pharmacologically related drugs (Figs. 1-8). They were all nebulized by a motor driven air pump and also by an intermittent positive pressure breathing apparatus (IPPB) (Fig. 5). In my experience with the asthmatic patient, the less expensive motor driven air pumps appear to be just as effective as the more expensive other IPPB units.

\*Lamar Vapo-Ross Air Company, 2729 Higbee Avenue, Memphis, Tennessee.



\* After Combination of Mediholor-ISO<sup>®</sup> Nebulized Aminophyllin c Special Attachment on Bird Mark 8 Respirator.

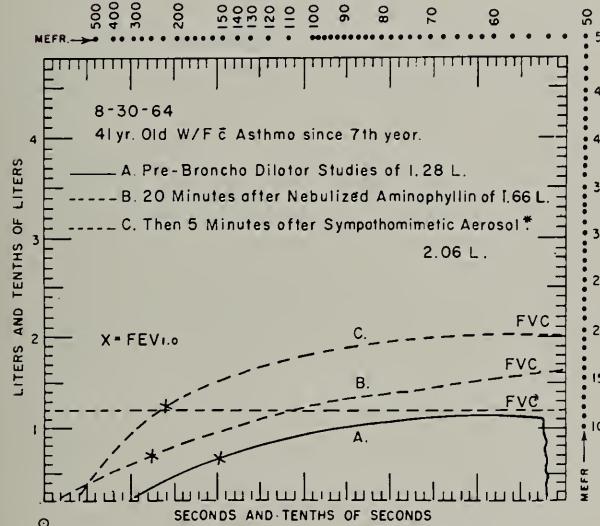
FIG. 5.



\* Mediholor-Duo<sup>®</sup> Riker Laboratories Inc.

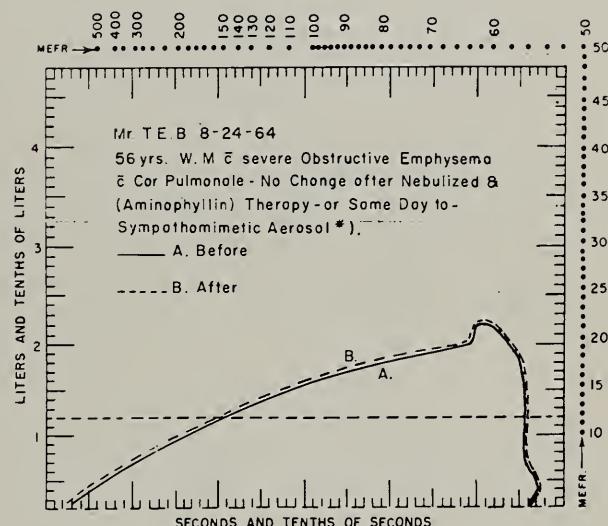
\*\* Iphyllin<sup>®</sup>, Brand of Dyphylline, 500 Mg./2cc. Dumas-Wilson & Company, St. Louis.

FIG. 7.



\* Mediholor-ISO<sup>®</sup> Riker Laboratories Inc.

FIG. 6.



\* Mediholor-ISO<sup>®</sup> Riker Laboratories Inc.

FIG. 8.

In addition to the symptoms and signs of improvement, the patient's response to therapy may be assessed objectively by function studies. As pointed out by Comroe<sup>11</sup>, simple spirometric measurement of the vital capacity and maximal flow rate requires no more than five minutes of the patient's time and involve no discomfort. Office studies such as these provide permanent records of the status of the patient at the first examination and also serve as objective guides to therapy in the individual patient. When the values recorded are abnormal or there is suspicion of asthma, a therapeutic trial of bronchodilator aerosol therapy may be given,

en, 10 to 15 minutes allowed to elapse to observe the maximal effect, and the pulmonary function test then repeated.

To evaluate the bronchodilator (and other) effects of aerosol aminophylline, three parameters were selected. The *maximal expiratory flow rate (MEFR)*, the *FVC* or *forced vital capacity*, and the *forced expiratory volume at the 1st second (FEV. 1.0 or 1st second timed vital capacity)*. The improvement of these parameters probably indicated several factors. The VC is the static lung volume or vital capacity and an improvement in this volume may be considered to be the result of opening of bron-

chioles which were completely closed or partially closed. The MEFR is a reflection of the mechanics of breathing which involves a number of factors, the most important of which, in patients with bronchial asthma, is bronchial obstruction. A marked reduction in the flow rates indicates that a mechanical problem exists which must be present during either expiration or inspiration or both.<sup>11</sup> Flow rates may be reduced from a normal of 200 to 300 liters to as low as 20 liters per minute. Such severe reduction in expiratory flow rate is particularly serious because it decreases the patient's ability to cough and to remove the secretions from this airway. This in turn aggravates the obstruction. Actually, obstruction in bronchial asthma may be caused by three pathologic conditions. Each is at least potentially reversible. Bronchospasm as the result of allergy may be considered, by definition, to be the main feature in allergic asthma. Bronchial infection, however, is a frequent accompaniment of asthma and may cause or contribute to the obstruction due to bronchial edema as well as excessive secretions. Thus, in evaluating the effect of a bronchodilator drug, one must consider the effect of such a drug on all three causes of obstruction. An improvement of the MEFR may merely mean a shrinking of bronchial mucousa which cannot be evaluated. Expectoration of bronchial secretions may result in an improvement of the MEFR. This is not easily measured, but can be estimated by observation. Many patients with chronic bronchitis or emphysema may improve after aerosol bronchodilator therapy with mild improvement of the MEFR possibly explained by coughing and expectoration caused or assisted by the aerosol bronchodilator therapy. However, in asthmatics improvement with bronchodilators usually is greater than would be accounted for by clearing of the bronchial secretions alone. Thus, it has been considered that the change in the MEFR represents either bronchial dilatation or reduction of bronchial edema, or both, with some help by coughing up the retained secretions with bronchial dilatation. The forced expiratory volume (the timed vital capacity) is a very simple test which measures the volume as expired by

maximal effort in a specific time. There is a reasonable correlation between the 1st second forced expiratory volume and the maximal voluntary ventilation (MVV) (or the maximum breathing capacity) during which time the ability of a patient to breathe at sustained high velocity levels is assessed. This depends upon the factors of muscular force available. The compliance of the lungs in the thoracic cage, and the resistance of the airway and pulmonary thoracic tissues. The forced expiratory volume also offers estimation of the rate of expiratory air flow.

To demonstrate the bronchodilator (and other) effects of aerosol aminophylline, patients were treated with this and compounds related to aminophylline as indicated in Cases 1-8. The base line pulmonary function studies were obtained on each of these patients having a severe asthmatic attack which called for prompt therapy for their acute dyspnea. The patient in each case, other than in Case 8 (who was not asthmatic), showed improvement. These other cases were asthmatic with documentation of allergic asthma as the basic diagnosis. In some of the patients asthma had been precipitated by the infection, exposure to inhalant allergens, and possible emotional factors, but all were definitely wheezing and acutely dyspneic. After the base line pulmonary function studies were obtained as described above, nebulized aminophylline was administered in the amounts above for 20 minutes. Twenty minutes later the pulmonary function studies were repeated. We have demonstrated here the (total) forced vital capacity and the 1st second forced expiratory volume (1st second timed vital capacity).\*\* We have also calculated the maximum expiratory flow rate (MEFR) with the method previously published<sup>12</sup>, but we have not drawn the latter to scale on the graphs of Cases 1-8 as this would interfere with the clarity of the other parameters. However, there was a comparable rise of the MEFR corresponding to the direction of improvement of the 1st second forced expiratory volume parameters.

In the 7 of 8 patients treated, there was a favorable therapeutic response which ap-

\*\*Vitalor,® McKesson Appliance Company, Toledo, Ohio.

peared to be reasonably predictable, was prompt and appeared to be for all the apparent purposes, safe. It should be noted that the patients of Cases 1, 2, 3 and 4 showed good response to aminophylline or a related compound alone. In Case 5 I grouped 2 forms of nebulized aerosol therapy together simultaneously for demonstration purposes. In Case 6, there was considerable improvement with the addition of a sympathomimetic aerosol following the nebulized aminophylline therapy. In Case 7, there was no further improvement later with sympathomimetic aerosol following a good response to the nebulized aminophylline alone. As mentioned the patient who had severe emphysema without allergic asthma, in Case 8, showed no significant response to either the nebulized aminophylline or the sympathomimetic aerosol given later that day.

In our patients, which include the illustrative 8 cases above and an additional 50 cases treated in the home, there were no reactions as may be associated with administration of the intravenous aminophylline, i.e., nausea, sometimes vomiting, a burning upper gastric or substernal pain, palpitation, dizziness, headache, and nervousness. In other allergic asthmatic children we have treated, none had the side effects which have been described in aminophylline poisoning<sup>13</sup> (irritability, convulsions, stupor, severe vomiting, gastric bleeding, dehydration) and none were observed here following the use of nebulized aminophylline bronchodilator therapy. One of the objections of using aerosol therapy has been pointed out by Comroe<sup>11</sup>. The inhaled drugs do not affect bronchioles that are completely occluded, and can only partially dilate bronchioles almost completely occluded because none or small amounts of the drug reach the affected airway. The efficiency of the drug depends upon the efficiency of ventilation of the bronchiole, and for this reason intravenous administration has the advantage since the drug is carried by the blood stream to every bronchiole which has a blood supply, whether occluded or not by the bronchial obstruction. However, this objection appears to be overcome in a good part by the slow administration of the nebulized medication as

used here, and our study does indicate improvement with less side effects than by the intravenous method. However, this paper does not imply any therapeutic superiority of the aerosol administration of aminophylline over the intravenous method. I wish to demonstrate the advantage of practicality of administration and less side effects and safety of the aerosol administration of aminophylline. It should be noted that the latter is not as prompt as it is with aerosol Isoproterenol but here again, through the use of nebulized aminophylline, one does not see the side effects of the aerosolized sympathomimetic drug which some patients do not tolerate. On the other hand in some patients there is a favorable result with the use of nebulized aminophylline as a diluting fluid with the aerosol Isoproterenol. I have provided the patients on many occasions (including an additional 50 patients in the home after being seen in the Office with a suitable nebulizer bowl and a motor driven pump for home use. This has been particularly useful for the patients who have demonstrated a favorable physiologic response to the nebulization in the office with the aim of relieving the acute asthmatic attack in the home and I believe we have saved many patients periods of hospitalization.

### Summary

Nebulized aminophylline can be given safely in the relief of acute dyspnea in patients with acute allergic asthma. This form of administration appears to meet the conditions of prompt, reasonably predictable action, and safety. As such it offers us additional tools in handling the medical emergency that is presented by the acute asthmatic with acute dyspnea, particularly in the home or the office.

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## THE OBJECTIVE EFFICACY OF PRAYER

(Continued from page 238)

a prior estimate of the size of an effect which might reasonably be expected to arise by chance. For this estimate the experimenters used Beecher's observation (*The Powerful Placebo, JAMA* 159:1602, 1955) of a 35% recovery rate from minor illnesses by subjects treated by placebo alone. (I believe this estimate is much too large an expectation for the kind of patient that was involved in the present experiment.) Thus they required that a difference between pair members must exceed 0.4 in order to be significant evidence of effect of prayer at the 5% level.

Two of the 19 pairs were discarded for the procedural reason of not having met initial criteria although both of these pairs tended to show a distinct advantage for prayer. One pair was discarded for reasons of poor attendance and 4 pairs were tied in their response and thus did not figure in the analysis. Ignoring the pairing, the clinical scores of 6 of the patients were improved and 26 were worse at the end of the study. Five of the 6 who showed improvement were in the prayer group. The probability that such a distribution in favor of the prayer treatment would occur by chance was less than 0.08. When the sequential analysis was done the data suggested that prayer treatment was very near to a significant effect, at the 0.05 level, but never quite reached this. The evaluation of the attitude of the patients toward their illness, that is the patient's appraisal of his own status during treatment was also indecisive.

The authors concede that the study group was too small to make a clear decision likely. They agreed that the sequential analysis was inappropriate. The fact is that during the first 6 months of the trial the treatment was successful at a level conventionally accepted as significant in

biologic experiments. In the next 6 months when a continuation of regular intercessionary prayer was less certain and perhaps less industriously done the treatment failed. The failure may be one of design rather than of treatment.

In summary, five-sixteenths of the subjects for whom prayer was made as a treatment showed improvement. The control group showed one-sixteenth with improvement. These patients were severely and chronically ill and one might question the curability of such patients, short of a miracle. Certainly Beecher's standards for spontaneous improvement which were used as criteria of response were obtained from less severely ill subjects. In favor of the prayer groups one should note, as the authors did, that they worked at a decided disadvantage. They had no access to the patient for whom they were praying and one can hardly doubt that some advantage of praying stems for association with the subject involved. The intercessionists had no such support and they may have lost their motivation in prayer after 6 months, even with the best intentions initially, since they had no way of knowing the result of their efforts. It is interesting that the psychiatric patients responded somewhat better to the prayer treatment than did the rheumatics. It is also of interest that several physicians declined to participate in the evaluation panel when invited. Some refused because they didn't wish to "put God to the test."

The authors end with a circumspect discussion of the difficulties with research in this field but they emphasize the importance of it. If prayer works we need to know of it because for all our big talk our treatment armamentarium is fragile and uncertain. This baptism to such research is a welcome sign of better information to come.

(Abstracted for the Middle Tennessee Heart Association, by George V. Manor, Sc.D., M.D., Nashville.)

## STAFF CONFERENCE

### Vanderbilt University Hospital\*

#### Malabsorption Syndrome

**DR. DAVID ROGERS:** We have for discussion today an elderly patient who had a severe malabsorption syndrome with diarrhea, weight loss and weakness. Dr. Caine will present the history and findings.

**DR. WINSTON P. CAINE, JR.:** This is the first admission to Vanderbilt University Hospital of an 80 year old white, married stone-mason who claimed excellent health until 3 years ago when he first noted the onset of diarrhea. He had 3 to 15 foul, greasy appearing stools per day. The stools were never formed, floated in the water and contained particles of undigested food. He had occasional mild upper abdominal "gas pains" present only when his diarrhea would subside. He maintained an excellent appetite and caloric intake.

His greatest weight has been 210 pounds and at the onset of his symptoms, 3 years ago, he weighed 198 pounds. Current weight is about 130 pounds. He had drunk excessive alcohol in his teens but drank only infrequently in the past 60 years. The patient was working actively until this hospital admission.

His past history and review of systems were unremarkable except for a chronic productive cough associated with the use of 2 packages of cigarettes a day for many years and 3 episodes of pneumonia. He had had polydypsia and polyuria for 2 years and had transient symptoms of a right hemiparesis which cleared completely 3 years prior to admission.

Physical examination revealed normal vital signs. He was an extremely alert 80 year old man. The skin was weathered and leathery. Significant findings included an emphysematous chest with scattered wheezes and rhonchi. The abdomen was scaphoid without enlargement of organs, and no masses or tenderness. Bowel sounds were increased to auscultation but there were no bruits. Neurologic examination was normal except for decreased vibratory sensation from the iliac crests distally.

Laboratory studies showed a normal urinalysis and complete blood count with a packed cell volume of 49%. The fasting blood glucose was elevated to 124 per 100 ml. and the urine showed a 1+ glucosuria during a glucose tolerance test. Serum electrolytes, protein, calcium, alkaline phosphatase, amylase, protein bound iodine, and prothrombin time were all normal.

Urinary 5-hydroxy indoleacetic acid determina-

tions were normal. Abnormal studies included decreased serum cholesterol (130 mg.), carotene (20 mg.), a diabetic glucose tolerance test, and flat vitamin A tolerance test. Quantitative studies showed 50 to 60 Gm. of fat in the stool daily before any treatment was initiated. A secretin stimulation test of pancreatic function showed a volume of only 29 mil/hour and only 23 meq/L of bicarbonate produced during peak stimulation.

X-ray studies showed speckled calcifications throughout the region of the pancreas, typical of chronic pancreatitis. (Fig. 1) The stomach, duo-



FIG. 1. Plain film of the abdomen showing spotty calcification in the region of the pancreas.

denum and small bowel mucosal patterns appeared normal on gastrointestinal series.

**DR. DAVID LAW:** Clinically the patient demonstrated a typical malabsorption syndrome with foul, greasy diarrhea, and weight loss in the face of continued good caloric intake. The course was essentially painless and of three years duration. The causes of the malabsorption syndrome are legion and accurate diagnosis is imperative because of the wide number of specific treatments we now have available. A brief and only partial outline of some causes for malabsorption is seen in table 1.

The two major causes of the malabsorption syndrome are abnormalities of digestion and abnormalities of absorption. In the former group are included the defects of gastric or hepatobiliary and pancreatic function that may follow disease or surgery. Satisfactory absorption results when there is an adequate admixture of ingested foodstuffs with adequate amounts of the products of the biliary and pancreatic system. Inadequacies may result from the loss of the function of a gastric reservoir secondary to operation or to the blockade or insufficient production of biliary and pancreatic products. Theoretically, treatment is available which should be able to correct

\*From the Department of Medicine, Vanderbilt University School of Medicine, Nashville, Tennessee.

Table I

## MALABSORPTION SYNDROME

I. INADEQUATE DIGESTION	
Gastric	
Surgery	
Hepatobiliary	
Cirrhosis	
Biliary tract obstruction	
Pancreatic	
Surgery	
Duct obstruction	
Inflammatory disease	
Mucoviscidosis	
II. INADEQUATE ABSORPTION	
Intestinal Disease	
Malignant—lymphoma	
Infiltrative—ileojejunitis	
Scarring—radiation	
Biochemical Abnormalities	
Celiac disease—adult and childhood	
Tropical sprue	
Disaccharidase deficiencies	
A-beta-lipoproteinemia	
Lymphatic Obstruction	
Malignant, inflammatory, infiltrative	
Decreased Absorptive Surface	
Surgery	
Large fistulae	
Blind Loop Syndrome	
Surgical	
Multiple jejunal diverticula	
Strictures	
Miscellaneous Causes	
Non-beta islet cell tumor of pancreas	
Mesenteric arterial disease	
Carcinoid syndrome	
etc.	

these defects but this is not always totally effective.

The second large group results from the failure of the patient to absorb normally the products of digestion and includes the important celiac disease group and other disorders which impair small bowel function.

Dr. Collins, what are the common screening or nonspecific tests that may point us toward a diagnosis of the malabsorption syndrome.

DR. JOHN COLLINS: The following tests, when abnormal, suggest a malabsorptive state, but are of little value in determining the specific etiology of the malabsorption in a given patient. Useful screening tests include: (1) Microscopic examination of the stool for fat after a small piece of stool is thoroughly mixed with several drops of 36% acetic acid and Sudan III stain. If steatorrhea is present, numerous pale orange fat globules can be identified under the high-dry objective. Chemical determination of excretion of fecal fat during a 3-day period, of course, gives a more accurate estimate of the degree of malabsorption. The normal individual, on an average hospital or home diet with a daily in-

take of fat of 50 to 100 Gm., should excrete less than 5 Gms. of fat per day in his stool. (2) The serum carotene level is depressed in most patients with malabsorption and is a commonly used screening test. It may, of course, be decreased in patients with thyrotoxicosis, simple starvation and in individuals with peculiar dietary habits. In the face of malabsorption, it may be normal if the patient is myxedematous or has taken a diet high in vitamin A and carotene-containing nutrients. Such screening tests are helpful in separating the patients with non-specific and functional diarrhea from those with significant malabsorption.

In addition, a wide gamut of commonly measured serum components may be depleted in patients with absorptive disorders and any of these, if low, may be the first clue to an underlying malabsorption. The prothrombin content, as well as the serum levels of calcium, protein, vitamin A, cholesterol, and potassium are frequently depressed in diseases with malabsorption. Rarification of bones related either to osteoporosis or osteomalacia may be seen on x-ray examination. An anemia due to iron, folic acid, and/or vitamin B12 deficiency is often present. Any of these changes may be the first indication that a malabsorption syndrome is present. Thus, patients may present with anemia, edema, bleeding diathesis, bone pain, weight loss, vitamin deficiency and many other symptom complexes.

DR. LAW: Once malabsorption is established, certain studies allow us to be more specific in diagnosis. X-ray evaluation, as in this instance, may point to abnormalities in the pancreatic or biliary tract causing steatorrhea. Small bowel X-rays may show specific lesions, such as multiple jejunal diverticula or strictures, small bowel tumors, or nonspecific patterns of steatorrhea.

The D-xylose tolerance test will usually distinguish between digestive abnormalities and absorptive abnormalities since it is usually normal in the former and diminished in the latter. As in all tolerance tests, accurate interpretation rests upon an appreciation of the steps involved in the test and of the factors that may alter the results. The 25 Gm. of d-xylose should be given orally to the patient in a fasting basal state,

ingestion must be guaranteed, gastric emptying must not be impaired, the 5-hour urinary collection must be complete, and laboratory errors must be considered. In addition, metabolic abnormalities must be ruled out. These include renal impairment and thyroid dysfunction. Since the d-xylose tolerance test is also a measure of renal function, low urinary levels may be found in patients with significant renal disease. Patients with myxedema show abnormally low urinary excretion and patients with thyrotoxicosis show abnormally high excretion after the standard 25 Gm. loading dose.<sup>1</sup> In people over the age of 60, interpretation is more difficult because older patients have a high incidence of urinary retention and renal dysfunction with arteriolar nephrosclerosis. Some differentiation may be made between poor absorption and poor renal function by measuring the peak serum level of d-xylose. During normal absorption with impaired renal function, the serum level will be elevated and the urinary level diminished. In malabsorption of small bowel origin, serum levels and urinary levels both tend to be decreased.

The glucose tolerance test, although flat in most malabsorptive states, frequently shows a diabetic pattern in chronic pancreatic disease. This may occur rarely in patients with diabetes who develop celiac disease or other small bowel disorders associated with steatorrhea. In addition, many apparently normal people show a flat glucose tolerance test.

Small bowel biopsy, using the peroral technic, is now a major investigative tool in the study of malabsorption and specific lesions may be identified in Whipple's disease, amyloidosis, and lymphoma of the bowel, as well as highly suggestive abnormalities in celiac disease, regional enteritis and other disorders.<sup>2</sup> Special staining technic, the use of electron microscopy and quantitative studies of enzyme systems and cell function provide exciting new possibilities for the study of patients with intestinal dysfunction.

Evaluation of pancreatic function through examination of stool or duodenal juice for trypsin and chymotrypsin,<sup>3</sup> or by the technic of secretory stimulation of the gland in conjunction with duodenal drainage<sup>4</sup> may give

direct evidence of exocrine insufficiency. The abnormal studies in this patient, coupled with the diabetic glucose tolerance test and pancreatic calcifications, led to the diagnosis of his disorder.

It is of interest that this 80 year old man represents what has been described as painless chronic pancreatitis.<sup>5</sup> The hallmark of pancreatitis is usually pain, many times to a degree requiring narcotics. In the absence of significant pain the diagnosis may remain unsuspected. It is estimated now that upwards of 10% of patients with chronic pancreatitis may have such minimal pain that the diagnosis of pancreatitis is not considered. These people present with diabetes mellitus, a malabsorption syndrome, or are found incidentally to have calcifications in the pancreas when the abdomen is studied for x-ray for some other purpose. Our patient had all three manifestations of this syndrome.

Dr. Collins, could you say a word about therapy in chronic pancreatic insufficiency?

DR. COLLINS: Therapy for chronic pancreatic insufficiency is directed toward placing the pancreas "at rest" and replacing the deficient digestive enzymes. A high-calorie, high-protein, six-meal diet is recommended, with fat intake adjusted to individual tolerance. Gastric hyperacidity is controlled with antacids and anticholinergic drugs, and with avoidance of caffeine, alcohol and tobacco where feasible. A daily multivitamin tablet is prescribed. If anemia is present, specific replacement therapy, ie, iron, vitamin B12, etc., is indicated after the etiology of the anemia has been determined. The management of pain may be a difficult problem for the chronicity and severity frequently lead to addiction when narcotics are given. Pancreatic extracts are effective in improving carbohydrate, fat and protein digestion and diminishing the diarrhea. Frequent small doses seem to be more effective than simply lumping a large number of tablets into two or three doses. For example, in a schedule of two capsules of a pancreatic extract every 2 hours when awake was given to the patient under discussion today. Therapeutic failures are generally related to insufficient dosage although even with massive doses, steatorrhea and creatorrhea may not clear completely.

In patients with acute pancreatitis laparotomy should be avoided unless cholelithiasis is demonstrated or complications develop. On the other hand, there is a definite place for surgical therapy in selected patients with chronic pancreatitis. If cholelithiasis is demonstrated, cholecystectomy and exploration of the common bile duct are indicated. The passage of gallstones through the common bile duct is a frequent cause of acute pancreatitis. If stricture of the common bile duct or pancreatic duct develops, or if there is repeated passage of gallstones, chronic pancreatitis may develop. The presence of a pancreatic abscess or pseudocyst is also an indication for surgical intervention. Pancreatic abscess usually becomes symptomatic 1 to 3 weeks after an acute episode of pancreatitis. This diagnosis is suspected when the convalescing patient develops fever, leukocytosis, tender abdominal mass, persistent elevation of the serum amylase, and displacement of the stomach and duodenum as seen on gastrointestinal X-ray series. Pancreatic abscesses should be drained externally. Pseudocyst of the pancreas often presents as a palpable epigastric mass that displaces the stomach and duodenum. Internal drainage of the pseudocyst is the treatment of choice.

With the exception of the three conditions discussed above, the indications for surgical intervention in chronic pancreatitis are somewhat uncertain. The large number of surgical procedures that have been tried in chronic pancreatitis is a reflection of the frustrating efforts to relieve pain and halt the progression of the disease. Although the results of most surgical procedures have been disappointing, they have merit in selected patients. (1) Removal of calculi obstructing a major pancreatic duct has been attempted. Unfortunately, it is often difficult to detect the site of ductal obstruction at operation. Furthermore, these calculi tend to recur. (2) Partial pancreatic resection with pancreateojejunostomy has been used on occasion. This procedure attempts to provide adequate drain-

age of the obstructed pancreatic ducts. Post-operative complications, such as fistula and abscess, may occur. More radical resections likewise give disappointing results. (3) Cutting a stenotic sphincter of Oddi may allow more adequate emptying of the pancreatic ducts and thereby decrease the tendency for acute exacerbations of pancreatitis. Such procedures have not been uniformly successful and on occasion have been followed by severe attacks of pancreatitis. (4) Bilateral thoracolumbar sympathectomy may provide relief of incapacitating pain in certain patients. However, the pain often recurs after two to three years.

All of these surgical procedures must be approached cautiously, especially in chronic alcoholic patients. Favorable long-term results from surgery are seen less frequently in this group.

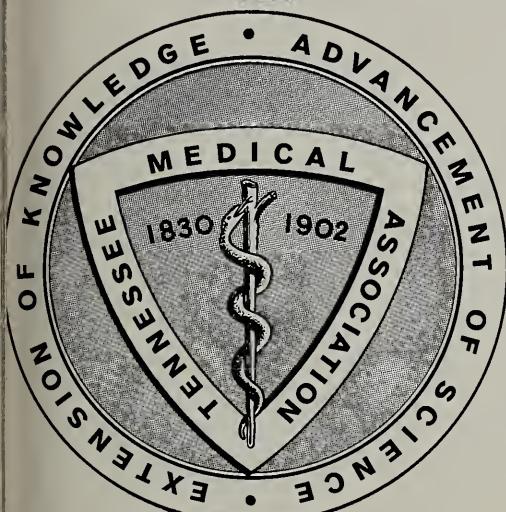
DR. CAINE: On the medical program outlined by Dr. Collins, our patient had remarkable symptomatic improvement with cessation of his diarrhea and return to one formed stool per day. Some steatorrhea persisted but he has gained weight steadily and his chemical abnormalities have disappeared.

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*131st*

*annual meeting*  
P R O G R A M



GATLINBURG

APRIL 17-19, 1966

*HEADQUARTERS: Civic Auditorium*

- 21 Outstanding Guest Speakers
- General Scientific Meeting
- 16 Specialty Society Meetings
- Technical Exhibits
- Presidents' Banquet

Monday, April 18—Mountain View Hotel

- House of Delegates

Opening Session Sunday, April 17, 1:00 p.m.  
2nd Session Tuesday, April 19, 9:00 a.m.

TENNESSEE MEDICAL ASSOCIATION

- Registration Daily

8:30 a.m. to 5:00 p.m. . . . No Registration Fee

**Special Section**

**SCIENTIFIC PROGRAM  
OF THE 131ST ANNUAL MEETING  
OF THE  
TENNESSEE MEDICAL  
ASSOCIATION**

**General Information**

► The official program contains detailed information on the 1966 annual meeting of the Tennessee Medical Association, conducted in Gatlinburg, Tennessee, April 17-18-19, 1966.

► **Registration**

The registration desk will be located in the Civic Auditorium, Gatlinburg. All members, visiting speakers, interns, residents, exhibitors, and guests are urged to register. Admission to all meetings and sessions and to the exhibits is by a badge secured at the registration desk. THERE IS NO REGISTRATION FEE.

Programs for all activities during the annual meeting are available at the registration desk. Those eligible to register are: Members of the Tennessee Medical Association; physicians from other states who are members of their respective state medical associations; residents, interns, medical students and guests.

MISS WILLARD BATEY  
*Chief Registrar*

► **Registration Hours**

(All times are Eastern Standard Time)

Sunday, April 17 . . . 8:30 A.M.

(Special registration for members of the House of Delegates from 8:30 A.M. to 1:00 P.M.)  
(Advance registration for exhibitors and early arrivals from 8:30 to 10:00 A.M. and after 1:00 P.M.)

Monday, April 18 . . . 8:00 A.M. to 5:00 P.M.

Tuesday, April 19 . . . 8:00 A.M. to 5:00 P.M.

► **Annual Meeting Headquarters**

Headquarters are located in the Civic Auditorium, Gatlinburg, where many activities are scheduled. The majority of the specialty societies will conduct their meetings concurrently with TMA in Gatlinburg. Others will be conducted in the hotels in Gatlinburg. Specialty societies meeting outside of the Auditorium are listed in this program under the "days" that the various societies are to meet.

► **TMA Headquarters Office**

The TMA headquarters offices will be located in the Auditorium at Gatlinburg during the meeting.

A member of the staff will be available to assist you at all times. Members of the House of Delegates, Officers, and Reference Committee

Chairmen can secure secretarial help when needed. Your headquarters staff is available to assist you in your needs.

J. E. BALLENTINE, *Executive Director*

L. HADLEY WILLIAMS, *Asst. Executive Director and Public Service Director*

TOM SAWYER, *Field Secretary*

MISS WILLARD BATEY, *Records and Bookkeeping*

MRS. DORIS DARROW, *Secretary*

MRS. SARAH WATKINS, *Secretary*

MRS. JEAN RAGSDALE, *Secretary*

► **President's Banquet and Social Hour**

The President's Banquet will be preceded by a Social Hour sponsored by the Tennessee Medical Association, beginning at 6:00 P.M. on Monday evening, April 18, in the Mountain View Hotel.

The BANQUET will follow at 7:00 P.M. in the Mountain View Hotel. TICKETS ARE AVAILABLE AT THE REGISTRATION DESK. A limited number can be accommodated. GET YOUR TICKETS EARLY.

► **Communications—**

*Emergency Telephones*

*Gatlinburg—436-5266 and 436-5273*

A blackboard will be placed in a conspicuous location in the Auditorium where doctors' calls will be listed. PLEASE CHECK OFTEN WITH THE LISTINGS ON THE CALL BOARD.

► **Specialty Society Luncheon Tickets**

Tickets to specialty society banquets and luncheons, as well as the Woman's Auxiliary affairs, can be obtained from Specialty Societies respective registration desks. PURCHASE YOUR TICKETS AT THE TIME OF REGISTRATION. The number that can be accommodated is limited.

► **House of Delegates**

The first session of the House of Delegates will be held on Sunday, April 17, beginning at 1:00 P.M. in the Civic Auditorium. The second session will be conducted on Tuesday, April 19, beginning at 9:00 A.M. in the Auditorium.

► **Scientific Meetings**

The scientific presentations at the 131st annual meeting will be those presented by the specialty societies meeting concurrently with the Tennessee Medical Association. Please see the Program listing the scientific meetings of the specialty societies each day. Every member attending is welcome to attend any scientific meeting of any specialty society. A special event will be presentations of general interest by guest speakers on Tuesday, April 19. The subjects presented will be of general interest to all attending the meeting. Please note topics and speakers in the program.

► **Specialty Societies**

Sixteen specialty societies are conducting their meetings concurrently with the Tennessee Medical Association in Gatlinburg. Scientific and business sessions of the specialty societies will be conducted on April 17-18-19. SEE DETAILS IN THIS PRO-

GRAM LISTED UNDER EACH OF THE ABOVE DATES AND UNDER "ANNOUNCEMENTS."

**► Woman's Auxiliary**

The Woman's Auxiliary to TMA will conduct all sessions of its annual meeting at the Gatlinburg Motor Inn. The registration desk of the Auxiliary will be located in the Gatlinburg Motor Inn and all committee meetings, board meetings, and general sessions will be conducted at the Inn.

**► Scientific Exhibitors**

Several educational and scientific exhibits will be presented. These will be displayed in the exhibit area of the Auditorium.

**► Technical Exhibitors**

The technical exhibitors will be located in the exhibit hall of the Auditorium. They may be visited each day of the annual meeting beginning on Sunday, April 17, from 2:00 P.M. until 4:00 P.M.—and continued from 9:00 A.M. until 5:00 P.M. on Monday and Tuesday, April 18 and 19. Exhibitors are an important part of the 131st Annual Meeting and each physician will be well repaid by spending some time visiting them and inspecting their exhibits. The exhibits will display many educational features of medical supply and latest developments in scientific undertaking.



## ANNOUNCEMENTS— SPECIAL MEETINGS AND EVENTS SPECIAL FEATURES

### MEDICARE — THE LATEST DEVELOPMENTS

Up to the minute information on regulations of the Medicare Law, effective on July 1, will be presented. Questions and answers will be part of this presentation.

**By: Russell B. Roth, M.D.  
Erie, Pennsylvania**

Dr. Roth is one of the most knowledgeable men in the U. S. on Medicare. He is a member of the AMA Advisory Committee to Health, Education and Welfare (HEW) and Chairman of AMA's Council on Medical Service.

Every member will want to hear this timely and important presentation.

4:00 P.M.

Monday, April 18  
in the

Gatlinburg Auditorium

## YOU'RE INVITED

7:15 A.M. — Tuesday, April 19

to the

TMA Continental Breakfast

Riverside Hotel — Gatlinburg

to hear



MR. JOHN T. McCARTY  
Asst. to the President  
of Rockford College,  
Rockford, Illinois

**Subject: HOW TO TRANSMIT  
IDEAS TO  
COMMUNITY GROUPS**

TMA has entered upon a program to keep better informed the membership of the Association. This is vital today in the rapidly changing conditions involving medical care. Mr. McCarty's presentation is unique and interesting. It's presented in a "different" manner and an event you cannot afford to miss.

**You're Invited . . . Please Attend**

### President's Banquet

Mountain View Hotel

Monday, April 18 — 7:00 P.M.

Social Hour — 6:00 P.M.

Sponsored by TMA

John H. Burkhart, M.D., President, Presiding  
Introduction of President-Elect—

G. Baker Hubbard, M.D.



## Technical Exhibitors

Technical exhibits for the 1966 Annual Meeting will be displayed in the Gatlinburg Auditorium Exhibit Hall. The newest developments in pharmaceuticals, equipment and services will be on display, with full information available through trained and experienced representatives.

Exhibits will be open Sunday, April 17, at 2:00 P.M., and Tuesday and Wednesday from 9:00 A.M. to 5:00 P.M. All physicians will find their time well spent in visiting exhibits and keeping abreast of what is new and useful. **YOUR ATTENDANCE IS URGED**, for your benefit as well as for an expression of cooperation with our exhibitors.

ABBOTT LABORATORIES North Chicago, Illinois	Booth 18
ASTRA PHARMACEUTICAL PRODUCTS, INC. Worcester, Massachusetts	Booth 22
BARNES-HIND LABORATORIES Sunnyvale, California	Booth 28
BRAYTEN PHARMACEUTICAL COMPANY Chattanooga, Tennessee	Booth 1
CIBA PHARMACEUTICAL COMPANY Summit, New Jersey	Booth 38
THE COCA-COLA COMPANY Atlanta, Georgia	Booth 31
DAIRY COUNCIL OF TENNESSEE Appalachian, Chattanooga, Knoxville, Memphis and Nashville Areas	Booth 6
DENBY BRANDON & ASSOCIATES Memphis, Tennessee	Booth 2
DE PUY MANUFACTURING COMPANY, INC. Warsaw, Indiana	Booth 4
THOMAS A. EDISON INDUSTRIES Nashville, Tennessee	Booth 25
ELI LILLY AND COMPANY Indianapolis, Indiana	Booth 23
ENCYCLOPAEDIA BRITANNICA, INC. Chicago, Illinois	Booth 29
FARRINGER AND COMPANY Nashville, Tennessee	Booth 30
FLINT LABORATORIES Morton Grove, Illinois	Booth 44
GERBER PRODUCTS COMPANY Fremont, Michigan	Booth 35
GEIGY PHARMACEUTICALS Yonkers, New York	Booth 37
LOWE SURGICAL SUPPLY COMPANY Maryville, Tennessee	Booth 16
J. A. MAJORS COMPANY Dallas, Texas	Booth 26
MEAD JOHNSON LABORATORIES Evansville, Indiana	Booth 24
MEDCO PRODUCTS CO., INC. James E. Bellamy Murfreesboro, Tennessee	Booth 10
MEDRIC, INC. Memphis, Tennessee	Booth 41
MERCK SHARP & DOHME West Point, Pennsylvania	Booth 36
MUTUAL BENEFIT LIFE INSURANCE CO. (Dunn-Lemly-Sizer) Nashville, Tennessee	Booth 5
NASHVILLE SURGICAL SUPPLY COMPANY Nashville, Tennessee	Booth 33
NORTH AMERICAN PHARMACAL Dearborn, Michigan	Booth 7
ORTHO PHARMACEUTICAL CORPORATION Raritan, New Jersey	Booth 52
PALMEDICO, INC. Columbia, South Carolina	Booth 20
PARKE, DAVIS & COMPANY Detroit, Michigan	Booth 45

WM. P. POYTHRESS & CO., INC. Richmond, Virginia	Booth 39
RICHARDS MANUFACTURING CO. Memphis, Tennessee	Booth 19
J. B. ROERIG & COMPANY New York, New York	Booth 32
SMITH, MILLER & PATCH, INC. New York, New York	Booth 46
SMITH, REED, THOMPSON & ELLIS CO. Nashville, Tennessee	Booth 3
TAFEL SURGICAL SUPPLY COMPANY Nashville, Tennessee	Booth 12
TENNESSEE GUILD OF DISPENSING OPTICIANS Nashville, Tennessee	Booth 21
THE UPJOHN COMPANY Kalamazoo, Michigan	Booth 27
U. S. VITAMIN & PHARMACEUTICAL CORP. New York, New York	Booth 11
THE WILLIAM A. WEBSTER COMPANY Memphis, Tennessee	Booth 34
WHITE SURGICAL SUPPLY CO. Knoxville, Tennessee	Booth 17

## VISIT THE EXHIBITS

The scientific meetings will be recessed twice for thirty minutes each on each day to give doctors an opportunity to visit with the exhibitors.

J. E. BALLENTINE  
*Executive Director*

## PROGRAM

### Sunday, April 17, 1966

1:00 P.M. (E.S.T.)

#### House of Delegates

Civic Auditorium — Gatlinburg

## SPECIALTY SOCIETIES MORNING



### TENNESSEE STATE SOCIETY OF ANESTHESIOLOGISTS

SATURDAY EVENING, APRIL 16, 1966

Riverside Hotel

7:00 P.M.

COCKTAILS

(Courtesy Knoxville Society of Anesthesiologists)

8:00 P.M.

DINNER

SUNDAY, APRIL 17, 1966

Legion Room Auditorium

10:00 A.M.

Business Meeting

12:00 Noon

Luncheon—Mural Room, Riverside Hotel





# GENERAL SCIENTIFIC MEETINGS AND SPECIALTY SOCIETIES

## MORNING

**COMBINED MEETING:**  
**TENNESSEE STATE OBSTETRICAL & GYNECOLOGICAL SOCIETY**  
**TENNESSEE PEDIATRIC SOCIETY**  
**TENNESSEE ACADEMY OF GENERAL PRACTICE**  
**TENNESSEE SOCIETY OF ANESTHESIOLOGISTS**

**Auditorium** Gatlinburg  
**MONDAY, APRIL 18, 1966**

### SCIENTIFIC PROGRAM

9:00 A.M.

- SYMPOSIUM: "Improved Newborn Care"**  
**"Regional Anesthesia by the Obstetrician"**  
By: PRESTON WILDS, M.D., Associate Professor of Obstetrics and Gynecology, University of Georgia School of Medicine, Augusta  
**"Respiratory Distress Syndrome in Newborn"**  
By: D. R. SHANKLIN, M.D., Associate Professor of Pathology, University of Florida School of Medicine, Gainesville, Florida  
**"Resuscitation of Newborn"**  
By: OTTO PHILLIPS, M.D., Professor of Anesthesiology, University of Pittsburgh School of Medicine, Pittsburgh, Pennsylvania

### Intermission to Visit Exhibits

### Questions and Answers by the Panel



## TENNESSEE STATE ORTHOPAEDIC SOCIETY

Huff House Mountain View Hotel  
**MONDAY, APRIL 18, 1966**  
**SCIENTIFIC PROGRAM**

9:00 A.M.

- "Osteochondritis of the Spine"**  
By: R. A. CALANDRUCCIO, M.D., Memphis  
9:20 A.M.  
**"Facet Fractures After Lumbar Disc Surgery"**  
By: FRED SAGE, M.D., Memphis  
9:40 A.M.  
**"Axillary Blocks for Orthopaedic Procedures on the Upper Extremities"**  
By: LEWIS GEORGE, M.D., Memphis

10:00 A.M.  
**GUEST SPEAKER: JOSEPH TRUETA, M.D., F.R.C.S., Nuffield Professor of Orthopaedic Surgery, University of Oxford, England**

10:45 A.M.  
**Intermission—Visit Exhibits**

- 11:00 A.M.  
**"Complications of Plaster and Traction"**  
By: JAMES HARKESS, M.D., Augusta, Georgia  
11:30 A.M.  
**"Spondylolisthesis"**  
By: F. P. DEWAR, M.D., Associate Professor of Surgery University of Toronto

12:00 Noon  
**LUNCHEON**  
**Dogwood Room—Mountain View Hotel**  
(Members, Guests and Wives)



## TENNESSEE ACADEMY OF OPHTHALMOLOGY

**Legion Room** Auditorium  
**MONDAY, APRIL 18, 1966**

### SCIENTIFIC PROGRAM

- 8:30 A.M.  
**Meeting Called to Order**  
By: I. LEE ARNOLD, M.D., President  
8:45 A.M.  
**"Carotid Artery Occlusion"**  
By: REECE W. PATTERSON, JR., M.D., Knoxville

9:05 A.M.  
**"The Use of Gamma Globulin In The Treatment of Herpes Zoster"**

By: E. MALCOLM CAMPBELL, M.D. and GORDON L. MASON, M.D., Johnson City

- 9:25 A.M.  
**"Presumptive Early Ocular Manifestations of Poly-arteritis Nodosus"**  
By: ALICE R. DEUTSCH, M.D., Memphis

- 9:45 A.M.  
**"The Congenital Rubella Syndrome with Virus Recovery: Clinical Manifestations and Ocular Pathology and Pathogenesis"**  
By: F. H. ROY, M.D., Memphis

10:05 A.M.  
**Intermission to Visit Exhibits**

- 10:20 A.M.  
**"Ectropion—A Complication of Xeroderma Pigmentosum"**  
By: ROLAND H. MYERS, M.D., Memphis

10:40 A.M.

**"Haradas Disease"**

By: WILLIAM GOLLIHAR, M.D., Chattanooga

11:00 A.M.

**Business Meeting with Otolaryngologists—****Holiday Inn**

12:00 Noon

**LUNCHEON AND PANEL DISCUSSION**  
**Holiday Inn**Panelists: PHILIP M. LEWIS, M.D., Memphis  
ALFRED N. COSTNER, M.D., Johnson City**WOMAN'S AUXILIARY TO THE  
TENNESSEE MEDICAL  
ASSOCIATION****MONDAY, APRIL 18, 1966****Gatlinburg Motor Inn****PROGRAM**

8:00 A.M.-2:00 P.M.

Registration—Lobby

8:00 A.M.

**Pre-Convention Board Breakfast**

9:45 A.M.

**General Convention Session****Memorial Service, Committee Chairmen report**

12:15 P.M.

**LUNCH**

1:00 P.M.

**"Around the Pacific in Forty Minutes"** (Film and Narration)

By: DR. AND MRS. HAROLD B. BOYD, Memphis

9:30 A.M.-4:00 P.M.

Hospitality Room Open

(Visit Arts and Crafts Exhibit—Civic Auditorium)

6:00 P.M.

**SOCIAL HOUR**

7:00 P.M.

**President's Banquet, Tennessee Medical Association****Mountain View Hotel**

(All Auxiliary Members Invited)

**AFTERNOON****TENNESSEE PEDIATRIC SOCIETY****MONDAY, APRIL 18, 1966**

12:00 Noon

Luncheon—Pine Room      Mountain View Hotel

**TENNESSEE OBSTETRICAL AND  
GYNECOLOGICAL SOCIETY****Espalier Room****Riverside Hotel****MONDAY, APRIL 18, 1966**

12:00 Noon

**Luncheon****SCIENTIFIC PROGRAM****"Experience with Oxytocics at the University Hospital"**

By: BRUCE E. WALKER, M.D., University of Tennessee Memorial Hospital and Research Center, Knoxville

**"Perineal Heat Applications With a Commercially Available Pack"**

By: SAMUEL BINDER, M.D., Chattanooga, and SISTER MARY REGIS, Memorial Hospital, Chattanooga

**"The Primipara With a Breech Presentation"**

By: ROBERT C. MULLINKS, M.D., and SAM P. PATTERSON, M.D., University of Tennessee College of Medicine, Memphis

**"Abruptio Placenta Associated With Venous Congestion"**

By: LAWRENCE WHITE, M.D., Nashville

**TENNESSEE THORACIC SOCIETY****Dining Room****Graystone Hotel****MONDAY, APRIL 18, 1966**

Joint Meeting with the

**TENNESSEE CHAPTER—AMERICAN COLLEGE  
OF CHEST PHYSICIANS**

12:00 Noon

**Luncheon**

1:00 P.M.

**SCIENTIFIC PROGRAM****"Experiences with the Treatment of Histoplasmosis"**

By: MAC HEDGINS, M.D., Knoxville

**"Diagnosis and Treatment of Mycotic Infection"**

By: GLENN KOENIG, M.D., Nashville

**"Medical Management of Fungal Diseases"**

GUEST SPEAKER: MICHAEL FURCHELOW, M.D., Lexington, Ky.

**"Experiences with Atypical Acid Fast Bacilli"**

By: CECIL TUCKER, M.D., Nashville

**"Cardiac Arrhythmias, Newer Concepts in Treatment"**

By: DAN COPELAND, M.D., F.C.C.P., Memphis

**"Life Expectancy With Left to Right Shunts at Atrial Level"**

By: CRAWFORD ADAMS, M.D., F.C.C.P., Nashville

## TENNESSEE SOCIETY OF PATHOLOGISTS

Bavarian Room                            Graystone Hotel  
 MONDAY, APRIL 18, 1966  
 Luncheon—Bavarian Room, Graystone Hotel  
 SCIENTIFIC PROGRAM

1:00 P.M.

"Discussion of the Techniques and Interpretation of the Newer Serologic Test for Syphilis, Including the Fluorescent Treponemal Antibody Test"

By: MISS ALWILDA L. WALLACE  
 1:30 P.M.

"Irrigation Cytology"

By: T. C. MOSS, M.D. and C. C. FARROW, M.D.  
 1:45 P.M.

"Light and Electron Microscopy Study of Rectal, Skin, and Muscle Biopsies in Tay-Sachs Disease"

By: A. A. KATTINE, J. SCHWARTZ, B. O. STURLOCK,  
 and M. S. SKINNER  
 2:00 P.M.

"Electrophoretic Separations of the Isoenzymes of LDH"

By: DANIEL F. BEALS, M.D.  
 2:30 P.M.

"Alveolar Proteinosis"

By: WILLIAM ACUFF, M.D.  
 2:45 P.M.

**Intermission to Visit Exhibits**

3:00 P.M.

"Nuclear Inclusions in a Pituitary Adenoma"

By: J. ROWLAND, M.D. and M. WOOD, M.D.  
 3:15 P.M.

"Hemolytic Component in Anemia of Uremia in Man"

By: E. ERIC MUIRHEAD, M.D.  
 4:00 P.M.

**Business Meeting**

### 4:00 P.M.—Auditorium MEDICARE—THE LATEST DEVELOPMENTS

Up to the minute information on regulations of the Medicare Law, effective on July 1, will be presented. Questions and answers will be part of this presentation.

By: RUSSELL B. ROTH, M.D.  
 Erie, Pennsylvania

Dr. Roth is one of the most knowledgeable men in the U. S. on Medicare. He is a member of the AMA Advisory Committee to Health, Education and Welfare (HEW) and Chairman of AMA's Council on Medical Service.

Every member will want to hear this timely and important presentation.

4:00 P.M.

Monday, April 18  
 in the  
 Gatlinburg Auditorium

## PRESIDENT'S BANQUET

Mountain View Hotel

Gatlinburg

Social Hour—6:00 P.M.—Banquet 7:00 P.M.  
 (Accommodations limited. Get your ticket early.)



## Tuesday, April 19, 1966

9:00 A.M.

### House of Delegates

Civic Auditorium — Gatlinburg

### YOU'RE INVITED

7:15 A.M.—Tuesday, April 19

To the TMA "Continental" Breakfast  
 Riverside Hotel                            Gatlinburg  
 to hear

MR. JOHN T. McCARTY  
 Asst. to the President of  
 Rockford College,  
 Rockford, Illinois

**Subject: How To Transmit Ideas  
 To Community Groups**

TMA has entered upon a program to better inform the membership of the Association. This is vital today due to the rapidly changing conditions involving medical care. Mr. McCarty's presentation is unique. It's presented in a "different" manner and an event you cannot afford to miss.

### LET'S COMMUNICATE

## MORNING

### TENNESSEE MEDICAL ASSOCIATION

(Open to All TMA Members)

### GENERAL SCIENTIFIC MEETING

Legion Room

Auditorium

TUESDAY, APRIL 19, 1966

SEMINAR ON IMMUNIZATION

Courtesy of the Communicable Disease Center,  
USPHS.

**Presiding:** D. GORDON PETTY, Vice President, TMA

10:00 A.M.

**Introduction:** SARAH H. WOOD SELL, M.D., Nashville

10:05 A.M.

**"Disease Status Reports"**

By: D. J. M. MACKENZIE, M.B., Ch.B., Atlanta  
Epidemiology Branch, C.D.C.

10:30 A.M.

**"Use and Abuse of Gamma Globulin"**

By: STANLEY A. PLOTKIN, M.D., Philadelphia  
Wistar Institute and University of Pennsylvania

10:55 A.M.

**"Measles Vaccine"**

By: FLOYD W. DENNY, M.D., Chapel Hill  
University of North Carolina

11:20 A.M.

**"Rubella"**

By: STANLEY A. PLOTKIN, M.D., Philadelphia

11:40 A.M.

**Panel Discussion**

Question and Answer Period

Moderator: SARAH H. WOOD SELL, M.D.

Resource Panel: D. J. M. MACKENZIE, M.B.  
STANLEY A. PLOTKIN, M.D.  
FLOYD J. DENNY, M.D.



## SPECIALTY SOCIETIES MORNING

### TENNESSEE ACADEMY OF OPHTHALMOLOGY

Room A

Holiday Inn

TUESDAY, APRIL 19, 1966

**SCIENTIFIC PROGRAM**

8:50 A.M.

**Meeting Called to Order**

By: I. LEE ARNOLD, M.D., President

9:00 A.M.

**"Amyloidosis of the Eyelid and Conjunctiva"**

By: D. ISBELL, M.D., Chattanooga

9:20 A.M.

**"Conjunctival Amyloidosis"**

By: BRUCE W. HERNDON, M.D., Memphis

9:40 A.M.

**"Differential Diagnosis of Papillitis and Papillary edema"**

By: JOSEPH W. WAHL, M.D., Nashville

10:00 A.M.

**"Papilledema Secondary to Pseudo-tumor Cerebri"**

By: J. ED CAMPBELL, JR., M.D., Knoxville

10:20 A.M.

**Intermission to Visit Exhibits**

10:40 A.M.

**"Conjunctiva Signs of Sickle Cell Disease"**

By: GEORGE R. WOODBURY, M.D., Memphis

11:00 A.M.

**"Unilateral Exophthalmos"**

By: CHARLES M. KING, M.D., Memphis

11:20 A.M.

**"Goniotomy for Congenital Glaucoma"**

By: J. WESLEY MCKINNEY, M.D., Memphis

11:40 A.M.

**"The Use of Bovine Bone in Orbital Floor Fractures"**

By: WILLIAM J. MCCOY, III, M.D., REECE W. PATTERSON, JR., M.D., and WALTER BENEDICT, M.D., Knoxville

12:00 Noon

**Luncheon and Panel Discussion**

**Room B—Holiday Inn**

Panelists: PHILIP M. LEWIS, M.D., Memphis  
ALFRED N. COSTNER, M.D., Johnson City



## WOMAN'S AUXILIARY TO THE TENNESSEE MEDICAL ASSOCIATION

TUESDAY, APRIL 19, 1966

Gatlinburg Motor Inn

**PROGRAM**

Registration—Lobby

7:15 A.M.

Continental Breakfast—Whaley Hall, Riverside Hotel

**"How to Transmit Ideas to Community Groups"**

By: MR. JOHN T. McCARTY, Guest of Tennessee Medical Association

(Open to All Members)

9:30 A.M.-4:00 P.M.

**Hospitality and Arts and Crafts Open**

10:00 A.M.-12:00 Noon

**General Convention Session  
County Presidents' Report**

12:30 P.M.

**Honors and Awards Luncheon—  
Installation of Officers**

3:30 P.M.

**Post Convention Board Meeting**

4:00 P.M.-5:00 P.M.

**Pick Up Arts and Crafts****AFTERNOON****TENNESSEE CHAPTER—  
AMERICAN COLLEGE OF  
SURGEONS****Auditorium****Gatlinburg****TUESDAY, APRIL 19, 1966****WELCOME**

The Tennessee Chapter, A.C.S. extends a cordial invitation to all physicians attending the TMA meeting, to be the guests at the scientific sessions of the A.C.S. on Tuesday, April 19, 1966. Residents, Interns and Students are especially invited.

**PROGRAM**

All Papers To Be Ten Minutes In Length In Order To Allow For Discussion.

**SCIENTIFIC PROGRAM**

1:00 P.M.

**"Renovascular Hypertension"**

By: JOHN H. FOSTER, M.D., and  
H. WILLIAM SCOTT, M.D., Nashville

1:15 P.M.

**"Carotid Body Tumor: Newer Methods of Diagnosis and Surgical Treatment"**

By: HARWELL WILSON, M.D., Memphis

1:30 P.M.

**"Experiences with a Transversalis Fascia Repair of Groin Hernias"**

By: JOHN E. KESTERSON, M.D., and  
WILLIAM ACUFF, M.D., Knoxville

1:45 P.M.

**GUEST SPEAKER:** JONATHAN E. RHOADS, M.D.  
John Rhea Barton Professor of Surgery and Chairman of Department of Surgery, University of Pennsylvania School of Medicine

2:30 P.M.

**Intermission—Visit Exhibits**

3:00 P.M.

**"Malignant Tumors of Salivary Gland Origin"**

By: LOUIS ROSENFELD, M.D., DON SESSIONS, M.D., BARTON McSWAIN, M.D., and HERSCHEL A. GRAVES, JR., M.D., Nashville

3:15 P.M.

**"Esophageal Hiatus Hernia and the Peptic Ulcer Diathesis"**

By: ROBERT NEWMAN, M.D., Knoxville

3:30 P.M.

**"The Prevention of Pulmonary Embolism by the Use of a Plastic Vena Cava Clip"**

By: ROBERT M. MILES, M.D., Memphis

3:45 P.M.

**"Clinical Renal Transplantation"**

By: CHARLES ZUKOSKI, M.D., ROBERT K. RHAMY, M.D., H. EARL GINN, M.D., and FRED GOLDNER, M.D., A. D. KILLEEN, M.D.

4:00 P.M.

**Business Meeting**

Tennessee Chapter, American College of Surgeons

6:00 P.M.

**EVENING PROGRAM****SOCIAL HOUR and BANQUET**  
**Whaley Hall—Riverside Hotel**

**SPEAKER:** MAJOR J. B. KLING, Nationally Known Cajun Humorist

Members of the Tennessee Medical Association and guests are invited to the Social Hour and Banquet. PLEASE PURCHASE YOUR TICKETS (\$5.00) EARLY TO SECURE RESERVATIONS.

**TENNESSEE DIABETES  
ASSOCIATION****Espalier Room****Riverside Hotel****TUESDAY, APRIL 19, 1966**

12:00 Noon

Luncheon

**SCIENTIFIC PROGRAM**

1:30 P.M.

**"Simplified Concepts in the Management of the Initial Treatment of the Acidotic Juvenile Diabetic"**

By: WESTON M. KELSEY, M.D., Professor and Chairman, Department of Pediatrics, Bowman Gray School of Medicine, Winston Salem, N. C.

2:00 P.M.

**"Mechanism of Inheritance in Diabetes Mellitus"**

By: BEN R. GENDEL, M.D., Professor of Medicine, Emory University School of Medicine, Atlanta, Georgia

2:30 P.M.

**"Problems in Managing Teen-Age Diabetics"**

By: WESTON M. KELSEY, M.D.

3:00 P.M.

**"The Gouty Diabetic or V.V."**

By: RICHARD WOOTEN, M.D., Memphis

3:30 P.M.

**"Hemachromatosis—Revisited"**

By: BEN R. GENDEL, M.D.



**in diarrhea**  
**associated with**  
**Gastroenteritis**  
**Spastic bowel**  
**Influenza-like**  
**Infections**  
**Antibiotic**  
**administration**



**normal activity...**

**promptly...**



com the  
executive  
director

# IMI MEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### RESUME OF BOARD OF TRUSTEES' ACTIONS MEETINGS OF JANUARY 8-9, 1966

#### Appointment of Nominating Committee

- In keeping with Chapter V, Section 2 of the By-Laws, the Board appointed a Nominating Committee for 1966 from the list of eligible delegates certified by the county medical societies. The following physicians were named to constitute the Nominating Committee:

EAST TENNESSEE: John H. Saffold, M.D., Knoxville; John M. Higgason, M.D., Chattanooga; Harmon L. Monroe, M.D., Erwin. MIDDLE TENNESSEE: Chas. C. Trabue, IV, M.D., Nashville; John O. Williams, M.D., Mt. Pleasant; Charles Petty, M.D., Clarksville. WEST TENNESSEE: Harold B. Boyd, M.D., Memphis; Charles N. Hickman, M.D., Bells; Arthur C. Dunlap, M.D., Paris.

The secretaries of all county medical societies have been notified of the composition of the Nominating Committee.

#### Impact Board of Directors Named

- The Board of Directors for Independent Medicine's Political Action Committee - Tennessee as appointed by the TMA Board of Trustees were:

FIRST DISTRICT - E. Kent Carter, M.D., Kingsport; SECOND DISTRICT - Richard C. Sexton, Jr., M.D., Knoxville; THIRD DISTRICT - Frank B. Graham, M.D., Chattanooga; FOURTH DISTRICT - Richard E. Green, M.D., Murfreesboro; FIFTH DISTRICT - James M. Hudgins, M.D., Nashville; SIXTH DISTRICT - J. O. Williams, M.D., Mt. Pleasant; SEVENTH DISTRICT - Oliver H. Graves, M.D., Jackson; EIGHTH DISTRICT - J. C. Moore, M.D., Dyersburg; NINTH DISTRICT - B. G. Mitchell, M.D., Memphis.

- The appointment of the Standing and Special Committees of the Association for 1966-67 were made. The appointments will be finally approved and will become effective following the annual meeting in April.

With reference to selection of recipients for the Distinguished Service Award, no recipient was selected for 1966. The Board unanimously recommended and approved a resolution in scroll form to be prepared, honoring Dr. Charles C. Smeltzer for his service to medicine, to the Tennessee Medical Association, and commanding him for the honor received as a result of his being elected to the Judicial Council of the American Medical Association.

#### Utilization and Claims Review Committees

- The Board established and named the composition for a "State Utilization Committee". It will be a Special Committee of TMA. The Board recommended that this committee should consist of the five surviving past-presidents. In addition, the Board approved the establishment of a Claims Review Committee in keeping with requirements under the Medicare Act (P.L. 89-97).

#### Long Range Planning

- The Board accepted and approved the report of the Long Range Planning Committee, as follows:

(1) Approved in principle a change in the meeting dates of the annual meeting to be effective in 1967, if possible.

If the proposal is approved by the House of Delegates, the annual meeting will begin on Thursday evening with the meeting of the House of Delegates, and conclude at Noon on the following Sunday.

(2) Approved an item in the budget to defray expenses of alternate delegates to attend the annual and clinical sessions of the AMA House of Delegates. This action requires an amendment to the By-Laws.

(3) Approved an amendment to be introduced in the House to amend the Constitution wherein trustees may be eligible to serve more than one term.

(4) Approved minor amendments to bring up-to-date and clarify other sections of the By-Laws.

(5) Upon recommendation of the Editor of the journal, the Board approved the formation of a "Committee on Publications".

#### **Policy Position On Medicare**

● The trustees formulated a TMA policy statement pertaining to Public Law 89-97. The statement is as follows:

(Policy position adopted in order that the TMA membership be fully informed as to the provisions of the law and their rights.)

1. That current practices and customary procedures with respect to certification of hospital admission and care should be continued under Public Law 89-97 and that hospital utilization committees should be composed only of practicing physicians.

2. That the charges for the services of hospital-based specialists should be billed and collected in the same manner as are the fees of other physicians . . . and that the AMA position to vigorously resist efforts to change this provision in the law be supported.

3. That all governmental programs, federal and state, reimburse physicians according to the usual and customary fee within the community without reference to any existing payment schedule as a basis . . . and that the medical aspect of Title XIX and Title II of P.L. 89-97 (grants to the states for public assistance) be administered by the Department of Public Health.

4. The Board of Trustees designates the Claims Review Committee to meet and work with the fiscal intermediary for Part B under Medicare. (Equitable Life Assurance Society of the United States.)

5. That an individual physician, acting independently and not in concert with others, may lawfully and ethically elect to treat or not to treat persons under the Medicare program, and that medicine will oppose any program which will interfere with the physician's freedom of choice with respect to participation or the acceptance of financial arrangements under which he shall provide care.

6. That the Legislative Committee be assigned to conduct the continuing study of all facets of the administration of P.L. 89-97 and its implementation, and report to the Board of Trustees at regular intervals.

#### **Representatives Appointed to Meet With State Officials On Title XIX of Medicare**

● Upon request of the Special Assistant to the Governor, the following representatives were selected by the Board to meet with state officials. They included Dr. John H. Burkhardt, President; Dr. Baker Hubbard, President-Elect; Dr. R. H. Kampmeier, Editor; Dr. K. M. Kressenber, Chairman of the Advisory Committee to the Department of Public Welfare; Dr. Roy Tyrer, Chairman of the TMA Legislative Committee; Dr. Morse Kochtitzky, Chairman TMA Communications and Public Service Committee.

#### **Heart Disease, Cancer and Stroke Amendments— P.L. 89-239**

● The Board revised the Liaison Committee to Medical Schools, naming Dr. W. O. Vaughan of Nashville, Chairman, and directed that the committee be alerted to become active in working with medical schools and other groups dealing with P.L. 89-239 (Heart, Cancer and Stroke Amendments).

(Continued on page 293)

# Public Service

THE TENNESSEE TEN

## Knoxville, Nashville Schedule TV Series

*Hadley Williams, Public Service Director*

- "Spotlight on Medicine", the TMA Communications and Public Service Committee's television series, will begin being programmed in Knoxville and Nashville March 27 and April 3 respectively.

WATE-TV in Knoxville will air the 13-week series at 1:30 p.m. Sunday afternoons and WLAC-TV in Nashville will program the show at 11:00 a.m. each Sunday.

Each "Spotlight on Medicine" program utilizes a panel of three local physicians and a station moderator to discuss a specific health problem or disease. Prior to the live discussion a dramatized film segment will be shown outlining a particular medical problem or surgical procedure.

The series began in Jackson over WDXI-TV in January and response from the viewing public has been excellent.

- The Second Tennessee Congress on Mental Illness and Health will be conducted in Nashville October 12-13 at the Hermitage Hotel.

Sponsored by TMA and its Mental Health Committee, cooperating organizations include the Tennessee Mental Health Association, Tennessee District Branch of the American Psychiatric Association and the Woman's Auxiliary to the Tennessee Medical Association.

Aims of the Congress are:

1. To bring together persons who have a common problem, for talking together.
2. To present psychiatric information about health topics of broad national, state and hamlet concern by speakers of unusual ability.
3. To bring up-to-date the facts of state planning for mental health and the prevention of it.
4. Some report of progress on (a) new mental health laws, (2) new educational programs and (3) development of comprehensive mental health clinics.
5. What are the hopes for the future?

The one-and-a-half day Congress will follow the same outline as the First Tennessee Congress which was held November 13-14, 1963 and was attended by 438 physicians, nurses, hospital representatives, Mental Health Association members, civic, church and psychological association members.

- The Loan Guarantee Program of the American Medical Association Education and Research Foundation extended an average of 685 loans per month to medical students, interns and residents during 1965. A total of 8,213 loans worth \$9,573,050 in principal amount were made for the year, and represented an 11 per cent increase from the number granted in 1964. The program, after four years of operation, has granted 27,500 loans worth \$31,857,138 in principal.

During 1965 AMA-ERF granted 509 loans in Tennessee totaling \$569,900. Only California with 912 and Texas with 668 were ahead of Tennessee in the total number of loans made during the year.

## Date Set for Second Mental Health Congress

## AMA-ERF Loans Continue to Grow

**HEW Names  
Medicare Carriers**

- The Commissioner of Social Security, Robert M. Ball, announced February 10 that forty-nine organizations in the health insurance field had been named to serve as contractors in the payment of physicians' bills for the Medicare program.

Among the organizations selected were 32 Blue Shield plans, 16 insurance companies and one independent health insurer. The contractors named will receive and pay physicians' bills under one-year contracts, subject to renewal upon demonstration of satisfactory performance.

Under their agreements with the Government, the individual contractor's primary responsibility will be to pay the reasonable charges for physician and other health services covered under Part B. In determining reasonable charges, the contractors will consider the usual and customary charges made by physicians, as well as the prevailing rates in the area for similar services. In paying for these services, the contractor must assure that the reasonable charges are no higher for Medicare patients than for comparable services under comparable circumstances for its own policy-holders or subscribers.

The Equitable Life Assurance Society of the United States was named as carrier for Tennessee. Equitable will also serve as carrier for Idaho, New Mexico and Wyoming.

As of February 15, 13,545,000 persons age 65 or over, or 71 per cent of the age group in the population, had enrolled for the supplementary medical insurance. 1,113,000 or 6 per cent have indicated they do not want the voluntary protection and approximately 4.5 million have not indicated their intentions.

- Figures released by the AMA as of December 31, 1965 show that Tennessee has a total of 2,955 active dues paying and veteran (dues exempt) AMA members.

Representation in the AMA House of Delegates currently allows one delegate for each 1,000 members or fraction thereof. Tennessee is represented in the AMA policy making body by three delegates.

With the addition of 46 AMA members during the current year, Tennessee would be entitled to the fourth delegate in 1967.

Of extreme importance is the fact that the AMA House has adopted a new policy regarding apportionment of the House of Delegates. When the total number of AMA delegates reaches 250 all future additions will be based on one delegate for each 1,250 AMA members from a state. The membership of the House of Delegates for 1966 is 238.

Dr. O. Morse Kochtitzky, chairman of the Communications and Public Service Committee, has written a personal letter to each non-AMA member in Tennessee urging them to join with their colleagues in belonging to medicine's national organization.

- The operator of Science Laboratories of Flagstaff, Arizona, Robert B. Holmes, has been arrested and faces a mail fraud charge in connection with the operation of a mail order medical laboratory, the Post Office Department announced.

Bond for Holmes was set at \$10,000 in the arrest which was the first in many years in connection with a medical laboratory.

- Every physician should have on display in his office the attractive AMA plaque which invites patients to discuss frankly any questions regarding services or fees. A prominently displayed plaque can do much to eliminate areas of misunderstanding between physician and patient.

The plaques can be obtained for the nominal charge of \$1.25 from AMA, 535 North Dearborn Street, Chicago, Illinois 60610.

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## CLINICOPATHOLOGIC CONFERENCE

### Vanderbilt University Hospital\*

#### Alveolar Carcinoma of the Lung Encephalitis Due to Herpes Simplex

**DR WILLIAM COPPAGE:** This 63 year old college history professor had had an illness of at least 6 months duration which he thought was primarily confined to the chest. He complained of "pain and soreness in the lungs" during this same period and some shortness of breath. He denied other usual symptoms of respiratory illness. In the 3 years prior to hospitalization he had traveled extensively in Europe and the Middle East and, more recently, in the San Joaquin Valley of California. There was no history of illness during this period. He had had mild diabetes mellitus for approximately 10 years which had been symptomatically controlled by diet and chlorpropamide (Diabinese).

On admission to the hospital the patient's vital signs were normal, and there was no fever. He had several physical findings compatible with the complications of diabetes mellitus, but the most striking abnormality was marked derangement in his mentation. There was a partial expressive aphasia, and he was slow and deliberate in his thinking; and halting in his speech. The general appearance was that of depressed mentation quite out of proportion to his talents and station in life. There was no stiffness of the neck, and variable minor reflex changes were described with no localizing value.

The initial hemogram was normal except for an elevation of the erythrocyte sedimentation rate. Later in the hospital course he developed a mild leukocytosis. The urinalysis was unremarkable save for glycosuria. There was a persistent elevation of blood glucose; and the blood urea nitrogen, although initially normal, rose during hospitalization. The serum alkaline phosphatase was elevated throughout, but liver function tests were normal. Concentration of serum calcium ranged from normal to low values, the lowest values generally associated with the progressive azotemia. The PBI was low on 2 occasions, but the T<sub>3</sub>-uptake was in the normal range. A number of spi-

cose concentration consistent with the level of blood glucose, elevated protein content, and a paucity of cells, about 70% of them being mononuclear. Repeated smears for bacteria, including acid-fast bacilli, and fungi were nonrevealing, and the cultures were negative. On passage of the cerebrospinal fluid through a millipore filter a number of unusual cells were seen, but these were not diagnostic of tumor cells. An EEG showed generalized cortical dysfunction of no etiologic value. All skin test were consistently negative, including histoplasmin, coccidioidin, blastomycin, old tuberculin, and PPD. Several gastric washings were negative on smear and culture for tubercle bacilli and fungi.

His hospital course was afebrile during the first 4 days after which he had a seizure and remained febrile until his death. The level of consciousness diminished and variable mild stiffness of the neck was noted. His pulse and respiratory rate increased with time; and despite a variety of therapeutic agents including steroids, antibiotics, and antituberculous drugs he died.

We have to deal here, then, with an illness in an elderly man of several months duration, initially afebrile, which involved both the lungs and the central nervous system. I wonder if at this time we might have Dr. Burko describe the chest x-ray for us.

**DR HENRY BURKO:** Small nodular densities are seen to be distributed uniformly throughout both lung fields. The pattern of distribution suggests a hematogenous origin which indicates consideration of the following processes: miliary tuberculosis, histoplasmosis, metastatic carcinoma. Most likely considerations to be included in a differential diagnosis are hemosiderosis and alveolar cell carcinoma.

**DR. WILLIAM COPPAGE:** We might begin our discussion, then by turning our attention to the miliary nodules throughout the lungs. A variety of diseases can give such a radiographic picture, and I have prepared a listing of some of those we should consider in the present instance (table 1).

Table I  
MILIARY PULMONARY NODULES

Infection	Granulomatous	Other	Malignant		Other
			Primary	Metastatic	
Tuberculosis		Sarcoidosis			Hemosiderosis
Histoplasmosis		Berylliosis			Silicosis
Coccidioidomycosis					

nal punctures were performed with the consistent finding of clear fluid under normal pressure, glu-

While hemosiderosis and silicosis can produce such a picture, I think we can readily eliminate them from further consideration. Hemosiderosis of the primary variety is generally found in young persons and man-

\*From the Departments of Medicine and Pathology, Vanderbilt University School of Medicine, Nashville, Tenn.

ifest by considerable respiratory symptomatology, hemoptysis, anemia, and early death. Secondary hemosiderosis is nearly always confined to individuals with chronic congestive heart failure, particularly that in connection with valvular disease, which does not seem to apply to our present case. Silicosis is always associated with an occupational history of inhalation of silica particles of specific size for long periods, and the general clinical picture is that of progressive pulmonary insufficiency. Diffuse granulomatous lesions often give such a radiographic picture. Berylliosis, I believe, we can readily eliminate for lack of an appropriate history of exposure, and I am unaware that this ever involves the central nervous system. Sarcoidosis is more difficult to exclude from serious consideration. Boeck's sarcoid is compatible with involvement of both the pulmonary and central nervous systems as described. However, I believe the age of the patient, absence of hilar disease, lack of apparent involvement of skin lymph node, liver, or spleen, and normal serum calcium and globulins make such a diagnosis highly unlikely.

It is infectious granuloma which so characteristically gives diffuse miliary lung lesions and is readily disseminated to the central nervous system. It is difficult to resist making a diagnosis of tuberculosis in the present case because we are faced with an elderly man with diffuse miliary pulmonary infiltration and a disease involving the central nervous system generally without focal signs but some indication of meningeal irritation. One might readily interpret this as indicating miliary tuberculosis with multiple brain tuberculomas, at least one of which has extended to, and ruptured into the subarachnoid space. I believe, however, there are a number of things which are not characteristic of overwhelming tuberculous infection. These include the six or more months of illness, the absence of fever, lack of more respiratory symptoms, failure to develop anemia, negative skin test, inability to isolate tubercle bacilli from sputum, gastric washings, or spinal fluid, and lack of a greater cellular response or lower glucose concentration in the spinal fluid. None of these factors individually excludes tuberculosis, but as a group, I be-

lieve, they are worthy of note. As an example, I have gathered together a list of circumstances in which a tuberculin skin test may be negative in the presence of active tuberculous disease (table 2). The fact remains, however, that over 99% of individuals with active tuberculosis do have a positive skin test.

Table 2

NEGATIVE TUBERCULIN REACTION WITH  
TUBERCULOSIS INFECTION

1. After desensitization
2. During incubation period
3. When the infection "has not taken" (after BCG vaccination or natural infection)
4. Cachexia
5. Miliary spread
6. Transitory during certain nontuberculous infectious diseases
7. "Reversion" of previously positive clinically healthy individuals
8. Biologically healed tuberculosis
9. Old age
10. Sarcoidosis
11. Hodgkin's disease
12. Steroid treatment
13. Certain cases of active tuberculosis in which none of above mentioned conditions can be demonstrated

Our comments about tuberculosis apply equally as well to histoplasmosis, a disease we have learned to consider very seriously whenever we think of tuberculosis in this endemic community. Disseminated histoplasmosis is generally of acute onset with prominent respiratory symptoms, albeit of a nonspecific nature not differing materially from many lower respiratory illnesses. The histoplasmin skin test is even less useful in the presence of miliary spread, being negative in about half. I believe, however, the constellation of features of the present case which are not characteristic of tuberculosis are also not characteristic of disseminated histoplasmosis. It should be noted that an active search for the organism was made.

Coccidioidomycosis is a disorder with which we have had relatively little experience in this community, but which becomes a serious consideration in face of the patient's recent return from a heavily endemic area. Disseminated coccidioidomycosis is perhaps associated with the most toxic clinical picture of the infectious granulomas, frequently presenting with high fever, dia-phoresis, prominent cough, and productive sputum. There is generally an abrupt onset,

and the skin test may be nonreactive in as many as 70%. Again, the duration of the illness, the absence of toxicity or fever, the lack of significant respiratory symptoms, other than shortness of breath, negative skin test, and inability to isolate the organism argue against this disease.

Malignant tumors can produce a miliary picture in the lungs as well as involve the central nervous system. In general, malignancy is associated with more variability in the size of individual lesions and is less evenly distributed throughout the lung fields than are granulomas. Of the primary malignancies of the lung both bronchogenic carcinoma and alveolar cell carcinoma have been known to produce miliary lesions throughout both lung fields. It is of note that the patient under discussion did not smoke nor did he have a history of chronic lung disease. Of malignancies originating outside the lung, those from thyroid, prostate, and colon have been observed with small miliary metastatic lesions involving the lungs. The patient's age, failure to find abnormalities of the thyroid gland on physical examination, and the absence of more apparent bone involvement are minor points against this being thyroid malignancy. The low PBI is of no assistance because thyroid carcinoma is very rarely associated with either hyper- or hypothyroidism. Examination of this patient's prostate gland on admission to the hospital failed to indicate evidence of tumor. Bone involvement is generally more obvious than observed in the case under consideration and extension to the central nervous system is decidedly uncommon, especially in the absence of gross visceral metastases. Colonic carcinoma cannot by any means be eliminated; but the duration of symptoms without signs pointing to the gastrointestinal tract, the absence of hepatic metastases, and involvement of central nervous system would be distinctly unusual for colonic malignancy.

Granting that we have good and sufficient reason to suspect either granulomatous or malignant disease in this case, I believe the findings are best explained by a malignant process disseminated throughout the lungs and diffusely to the central nervous system, with some extension to the

contiguous meninges resulting in the abnormalities noted in the spinal fluid. Whether or not dissemination below the diaphragm occurred is not possible to say. I believe, however, that the elevation of the serum alkaline phosphatase does reflect bone involvement despite the fact that no radiographic evidence of bone disease was commented on in the hospital x-rays. Disseminated malignancy would be compatible with the relatively long course, absence of localized symptoms, lack of fever, toxicity, or anemia, lack of a picture characteristic of full-blown meningitis, absence of positive skin tests for granulomatous disease, and inability to isolate an infectious agent. I have no assurance we can do more than guess at the origin of the suspected malignancy, but from the information at hand one would suppose that the primary lesion was situated above the diaphragm.

DR. JOHN SHAPIRO: This case had a variety of pathologic findings of interest but I shall try to confine myself to those most pertinent to the clinical course and death of this patient. The major site of disease encountered on gross examination was in the lungs which were both heavy, weighing 750 and 650 Gm. and tending to maintain their shape. Innumerable nodules were evident subpleurally and throughout the interstitium of the lung—these varied in size from pinpoint to nodules of some 3 cm. Frozen section of one of the nodules established a diagnosis of carcinoma involving the lung, probably alveolar cell in type. The bronchi were opened but no site of origin was demonstrated in the bronchi. Very frequently, as we have pointed out before, we will define a large mass in association with a so-called alveolar cell carcinoma and will adduce evidence not infrequently for the origin of such a tumor in a pulmonary scar. We could not make such association in this particular case. This tumor grew in a characteristic way for the so-called alveolar cell carcinoma, tending to grow on the surface of alveoli, often times maintaining a lumen (Fig. 1). The constituent epithelium varied from columnar to a squamous type as is so frequently the case in this type tumor. This pattern of growth was maintained in the metastatic foci which included the mediastinal and retroperitoneal lymph

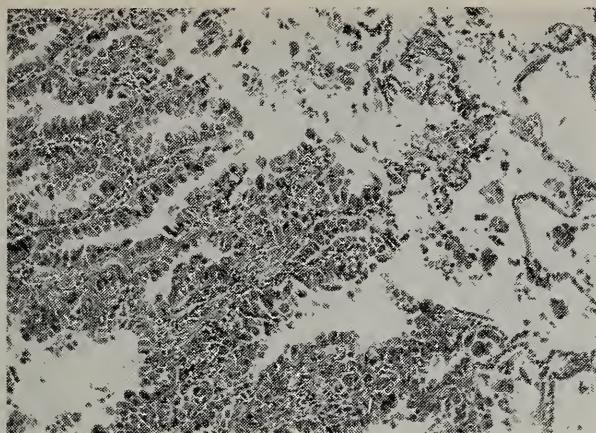


FIG. 1.

nodes, both adrenals, the bone marrow microscopically, and even such an organ as the spleen, on microscopic examination.

When we encounter such a diffuse neoplasm of the lung with evidence of respiratory difficulty, it becomes mandatory to seek meticulously for another site of origin with the possibility that the pulmonary neoplasm is secondary. Such was not demonstrated in this particular case—the thyroid, stomach, pancreas and other likely sites were excluded by our examination. An argentaffinoma of the small bowel and a benign polyp of the large bowel were demonstrated but these could not possibly have been the site of origin of the tumor.

There was an interesting involvement of the brain in the form of a neoplastic meningoitis. A few small nodules were found in the meninges grossly, and sections from these areas showed tumor cells growing within the meninges and extending into the vascular spaces of the brain. There were no secondary nodules within the brain substance itself.

Another disease state which was present, and one which certainly did contribute to his terminal illness, was demonstrated in the central nervous system. In association with areas of softening and some perivascular infiltration of round cells, intranuclear inclusions typical of inclusion body encephalitis were demonstrated (Fig. 2). Herpetic lesions were not demonstrated elsewhere. Electron micrographs of the case at hand shows particles identical with those we have identified in both infected animals and in spontaneously occurring human cases from which herpes simplex has been isolated. The picture of progressive disorienta-



FIG. 2.

tion, the high fever and the convulsion fit well into the clinical picture which has emerged from studies of cases of viral encephalitis due to herpes simplex. Additional pathologic findings include an early nutritional cirrhosis of the liver with active breakdowns of cells.

Let me emphasize that the patient's main disease state was neoplastic as Dr. Coppage postulated. We feel certain that it represents the not infrequently encountered alveolar cell carcinoma of the lung. This tumor may exhibit a variety of morphologic patterns bearing such descriptive terms as pulmonary adenomatosis on the one hand, and alveolar cell carcinoma on the other. The much discussed resemblance of the localized variant of this disease state to so-called "jaagsiekte" of sheep is, as far as I know, entirely on a morphologic basis with little else to suggest that they have a common etiology.

#### *Final Diagnoses:*

Alveolar carcinoma of lung with widespread metastases, and encephalitis due to herpes simplex

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# President's Page

## THE ANNUAL MEETING OF THE TENNESSEE MEDICAL ASSOCIATION



DR. BURKHART

Beginning on Sunday, April 17, 1966, and extending for three days, the Tennessee Medical Association will hold its 131st Annual Meeting in Gatlinburg, Tennessee. TMA last met in Gatlinburg in 1958, and on this occasion enjoyed one of its better attended meetings. The facilities, accommodations, and scenery in Gatlinburg are the best in the state, and the 1966 Annual Meeting attendance should exceed all previous ones.

Annual meetings of the Tennessee Medical Association have many purposes. Through the scientific sessions presented by the specialty societies, the physicians of Tennessee are offered an opportunity to broaden their medical knowledge by learning new ideas and new techniques and by review of others which require refreshing. The rapidly developing socio-economic changes and concepts make it difficult for a busy physician to keep abreast of the times, and the annual meeting can serve as a source of information in this regard which will prove invaluable to him. This year, of course, this subject will be more pertinent than ever before, and arrangements have been made to bring to the Gatlinburg meeting one of the most knowledgeable persons in the arena of health, welfare, and social security to enlighten the profession of Tennessee concerning the new programs and requirements which are soon to go into effect. Dr. Russell B. Roth, Erie, Pennsylvania, Chairman of the Council on Medical Service for the American Medical Association and key member of the AMA Advisory Committee to HEW, will speak on Monday afternoon and be available for questions, answers, and discussion on the general subject of the Medicare Law.

Much of the business of the state association is conducted at the annual meeting, and the establishment of new policies and revising of older ones occupies much of the time of the House of Delegates. Annual reports are presented and the work of the Association is reviewed. In this connection it might be appropriate to point out that while the House of Delegates is composed of representatives who are selected and sent by the county medical societies and who are the ones that conduct the business of the society, the meetings are open to all members of TMA and are certainly most informative.

Not the least of the purposes of the annual meeting is the opportunity for professional fellowship and social activity. The annual meeting is a work session, but it is also designed for pleasure. It gives the attending physician an opportunity to renew acquaintances and friendships from across the state, to visit with colleagues whom he hasn't seen for some time, and to for a short time relax in an atmosphere of friendliness and mutual regard.

The Annual Meeting of the Tennessee Medical Association needs your attendance. You as a member of TMA need to attend its annual meeting. I urge you to make your plans for a fruitful and enjoyable three days in Gatlinburg April 17-19, 1966.

President

# THE JOURNAL

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MARCH, 1966

## EDITORIAL

### PRESSOR HYPERTENSION

The kidney may produce hypertension by at least three mechanisms: (1) the elaboration of a pressor substance (pressor hypertension); (2) the failure to produce some humoral substance (renoprival hypertension); and (3) the abnormal retention of salt and water.

Goorno and Kaplan<sup>1</sup> have recently studied patients with hypertension and the renal pressor material involved in the first of these mechanisms. In certain patients the kidney apparently elaborates a pressor substance in the presence of renal ischemia and thereby produces hypertension. The prevailing theory suggests that a decrease in the pressure within the renal afferent arteriole causes the juxtaglomerular apparatus to release renin. Renin then acts enzymatically upon a substrate in the circulation to produce angiotensin I. This substance is then acted upon by a converting enzyme to produce the potent pressor substance angiotensin II. It is this substance

which presumably is the pressor material being measured in these tests.

These authors have attempted to assess the role of the pressor substance in various hypertensive states. The material is measured directly by bio-assay of renal venous blood and indirectly by the angiotensin-infusion test. Their results support the validity of the angiotensin-infusion test as a measure of renal pressor substance. Since the exact nature of the renal pressor substance is not known, their results cannot be taken to indicate that the response to exogenous angiotensin is specifically related to the level of endogenous angiotensin. However, there was excellent correlation in 40 of 45 patients in this study indicating that sensitivity to the angiotensin-infusion test indicates absence of renal pressor substance and that resistance to the angiotensin-infusion test indicates an elevated level of renal pressor substance. The five discrepancies may well be attributed to technical errors or associated disturbances due to previous therapy.

Using the results of both procedures certain conclusions about the role of the renal pressor mechanism in various hypertensive diseases can be made. The renal pressor mechanism is not involved in essential hypertension initially. However, as the hypertensive process accelerates and finally becomes malignant, pressor substances do appear, presumably the result of ischemia induced by intrarenal occlusive vascular disease. Although the pressor substance may aggravate the hypertensive process it is considered a secondary rather than a causal factor.

Patients with hypertension in association with acute and chronic renal parenchymal diseases apparently have no increase in renal pressor substance and have sensitivity in the angiotensin-infusion test.

The hypertension seen in renal vascular disease is widely accepted as being pressor in origin. If this is true such patients with functionally significant and thereby surgically amenable renovascular disease should have either pressor substance in the renal venous blood or resistance in the angiotensin-infusion test. The authors have combined their present data, previous data using the infusion test alone, and data pre-

viously reported by McPhaul and associates<sup>2</sup> with the pressor assay alone, considering only patients with unilateral vascular disease who were subjected to definitive surgical repair. The combined data showed that surgical success occurred in all 19 patients with positive pressor assays and in 16 of 19 who were resistant to angiotensin. Two of the failures died of malignant hypertension shortly after operation. All patients who had negative pressor assays and all with angiotensin sensitive tests showed no response of hypertension to definitive surgery.

As ignorance about the mechanisms producing hypertension is gradually chipped away, our patients will profit. This study will help the physician select those few patients with surgically amenable renovascular disease in whom surgical intervention is indicated.

A.B.S.

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#### TITLE XIX

Now that the smoke has cleared from the Medicare battlefield one may take a look at the remainder of that bill—*Title XIX*.

Under this portion of the law, the medically needy must be provided medical care on a par with Medicare by 1975. This will include, then, recipients of welfare benefits under Aid to the Blind, Old Age Assistance, Aid to the Family with Dependent Children, Medical Aid for the Aged, and Aid to the Disabled. It is estimated that by 1975 some 40 million of our people will be cared for by the joint venture of Medicare and *Title XIX*.

Federal funds were not appropriated for this portion of the Medicare law since recipients will not benefit by the Social Security Funds euphemistically described as "insurance" monies. However, federal funds will match state funds on a varying scale, dependent upon a state's tax potential, from 50 to 83 per cent. By 1970 federal funds

will be withdrawn from present medical care programs. The time-table indicates that each state must, by July 1, 1967, offer at least 5 basic services:—inpatient hospital services; outpatient hospital services; other laboratory and x-ray services; skilled nursing home services, and physician's services. States may offer a number of other services if they choose. By July 1, 1975, the states *must* offer "comprehensive care and services" based, probably, on the yardstick which will be developed by the rules and regulations implementing Medicare. The state will be required to assume at least 40% of the nonfederal share of the costs of medical care and may charge the remainder to its cities and counties until July 1, 1970. After that the state must be responsible for equal care in all its political divisions.

Under *Title XIX* the state may not use cost-sharing or deductions for inpatient hospital service. For needy Medicare recipients the state must pay the deductibles, and the money provided under *Title XIX* may be used to buy health insurance for Medicare patients. In fact, by the end of 1967 the state must decide whether it wishes to pay the \$3 monthly premium for the medical-surgical coverage of the needy elderly under Medicare.

Some states have already set the machinery in motion to embark forthwith upon the implementation of *Title XIX*. Others are actively planning for it.

Several groups (among which was a representative group from TMA) have appeared before a committee appointed by Governor Clement to discuss this portion of the Medicare law which will need to be an item of business for the next meeting of the State Legislature. The above comments provide the signposts. Each successive legislative session until 1975 will need to appropriate increasing increments of money. What this will mean to the taxpayer is anyone's guess as of today—increased sales taxes, property taxes or state income tax—who knows!

One change will be certain, and the older generation of physicians will observe it with a degree of sadness. In the spirit of the Hippocratic Oath and Christianity, and as a philosophic and ethical concept of the man entering upon a medical career, service

to the human race and compassion have been among his attributes. The giving of time and care without remuneration, woven into a human being, adds something to character that defies definition. Speaking in generalities, this applies only to one profession—the medical. However, to continue to give medical care in the future without remuneration is unrealistic, not only in the near future but in pointing to the day, as it will inevitably arrive, when all will be covered under a federally based umbrella. There will be no indigent patients! It will become inconceivable to the coming generation of doctors to visualize giving service other than that in the spirit of the plumber

or electrician, as it is called upon to exercise its technical talents.

One hopes this will be a fair exchange for medical care for all—whether good or bad, time will tell. Future generations will marvel at such seeming maudlin ramblings as Robert Louis Stevenson's—"There are men and classes of men that stand above the common herd; the soldier, the sailor, and the shepherd not infrequently; the artist rarely; rarer still, the clergyman; the physician almost as a rule. He is the flower (such as it is) of our civilization,"—and wonder what it was all about.

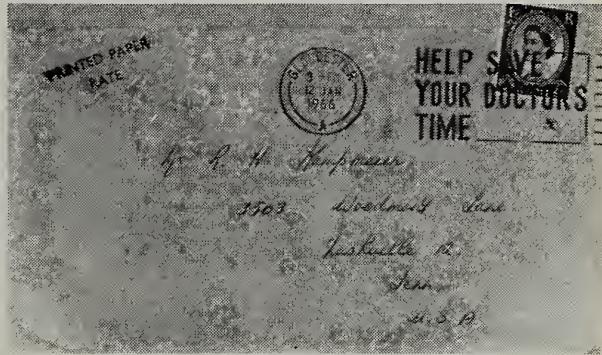
R. H. K.

### AN INTERESTING STAMP CANCELLATION

It recalls the *White Paper* of the National Health Service of Great Britain presented on NBC Television in 1963. On this page I wrote the following at that time:

"The general practitioner speaking for the Service commented that now he did not need to buy 'fancy equipment' to attract patients! His statistics are interesting—he sees 70 patients a day, requiring 2 minutes for each, a 'refill' prescription takes only 20 seconds, and that only one in 15 (3 or 4 out of 70) need an examination which he says takes about 5 minutes."

Does the current stamp cancellation beg people not to squeeze out every penny to which they are entitled under "free" medi-



cine? Does it represent a forlorn hope of increasing time with the doctor from 2 minutes to 3 minutes!

er L. DeRuiter. The meeting was held at Morrison's Cafeteria.

### DEATHS

**Dr. John H. Lotz**, 60, Memphis, died January 29th.

**Dr. W. H. Walker**, 46, Memphis, died January 26th.

### PROGRAMS AND NEWS OF MEDICAL SOCIETIES

#### Chattanooga-Hamilton County Medical Society

Dr. W. W. Bauer, Chicago, was guest speaker at the dinner meeting of the Society on March 1st. Dr. Bauer's address was entitled "As I See Medicine in 1966." A scientific presentation entitled "The Pioneer Syndrome" was presented by Dr. Pet-

#### Knoxville Academy of Medicine

The February 8th meeting of the Society was held in the Academy of Medicine Building. The scientific program on "Care of Common Athletic Injuries" was presented by Dr. H. O. Bourkard, Orthopedist.

#### Northwest Tennessee Academy of Medicine

A dinner meeting of the Academy was held on February 22nd in Union City. Dr. G. Baker Hubbard of Jackson, Dr. Oscar McCallum, Henderson, and Mr. Jack Ballentine, Executive Director of the Tennessee Medical Association, outlined activities of the state association and discussed per-



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tinent facts concerning Public Law 89-97, and Medicare Law. A movie, entitled "The Critical Dimension", outlining the program and activities of the American Medical Association, was also presented.

### Bedford County Medical Society

A program of physical therapy service will be sponsored by the Bedford County Medical Society in 1966, and offered through the facilities of the local hospital and health department. The project, financed through United Givers Fund, began in 1965 and proved to be a vital service to the community. The service is aimed at rehabilitation of acutely or chronically ill patients suffering from strokes, arthritis, fractures, amputations and other potentially crippling conditions. Under direction of the family physician and from recommendations by the physical therapist, regular nursing care is given to patients in the form of normal joint range of motion, passive and active exercises.

### Dickson County Medical Society

The Dickson County Medical Society, in a recent meeting, agreed to extend outpatient medical care to the dependents of service men engaged in Viet Nam. The following resolution was unanimously approved by the Society:

Be it resolved by the members of the Dickson County Medical Society that we are in complete sympathy with the foreign policy of the Government of the United States of America in its effort to promote lasting peace throughout the world, and we are proud of our fellow Tennesseans who are now serving and who will serve our country in Viet Nam in trying to bring to an early end the fighting which has already cost the lives of many of the fine brave youth of this great state;

Be it further resolved, that we here at home realize the hardships and the inconveniences that our service men are going through in being separated from their loved ones while on active duty in Viet Nam;

Be it further resolved, that we want to express our appreciation for the great effort and sacrifice being made by our fellow Ten-

nesseans by offering our services in the following manner:

NOW THEREFORE BE IT RESOLVED, if any man who has ever been a patient of any of the members of the Dickson County Medical Society is called to serve his country in the struggle in Viet Nam, then we willingly agree to extend outpatient medical care to his wife and children free of charge so long as he remains on active duty in that theater of operations;

BE IT FURTHER RESOLVED, that a copy of this resolution be forwarded to the proper authorities of the Tennessee Medical Association, the American Medical Association, and to the War Department of the United States of America.

## NATIONAL NEWS

### The Month in Washington

(From the Washington Office, AMA)

President Johnson has put a price tag of about \$4.5 billion on his fiscal 1967 health programs, both domestic and international. The President's fiscal 1967 budget, for the year beginning next July 1, calls for spending about \$4.3 billion on domestic health programs under the Department of Health, Education and Welfare. Cost of Medicare benefits will be in addition to this total because they will be paid for by Social Security taxes.

Spending on domestic health programs would have been greater if some—such as the new heart disease, cancer and stroke program—had not been cut back because of increased costs of the Viet Nam War. The cutbacks mainly were effected by requesting smaller appropriations than Congress had approved. The appropriation requested for the heart disease, cancer and stroke program was only half of the \$90 million authorized by Congress.

Johnson told Congress he would submit international health legislation to: create an International Career Service in Health; help meet health manpower needs in developing nations; combat malnutrition; control and eradicate disease; cooperate in worldwide efforts to deal with population problems. Johnson said the United States must



## FOR A CLEAN START IN VAGINITIS THERAPY

**superior cleansing action** ■ STOMASEPTINE is "a highly effective mucolytic cleansing agent"<sup>1</sup> that removes debris and flushes out secretions more thoroughly than acid douches.<sup>1</sup> Alkaline STOMASEPTINE "dissolves and removes leukorrheal secretions"<sup>1</sup>—whereas acid douches tend to "coagulate or set the vaginal contents."<sup>2</sup> Low surface tension and release of nascent oxygen contribute to deep penetration and cleansing of rugae.

Contains: sodium perborate, sodium bicarbonate, sodium chloride, sodium borate, menthol, thymol, eucalyptol, methyl salicylate and aromatics—  
6 oz. and 15 oz. jars; cartons of 12 10-gm. packets

*Literature and professional supply on request.*

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**enhances specific therapy** ■ Thorough cleansing of the vaginal vault with STOMASEPTINE enhances the effectiveness of specific vaginitis therapy, ensures maximum contact of topical medication with mucosa.

**excellent patient acceptance** ■ Anti-pruritic and soothing, pleasantly scented—patients feel "fresh and clean."

1. Weese, H.: Personal Communication, Sept. 25, 1964. 2. Glynn, R.: Obst. & Gynec. 20:369, 1962.

**STOMASEPTINE**  
DOUCHE POWDER®

be prepared to help developing countries that ask for aid in controlling population expansion. He said: "population growth now consumes about two-thirds of economic growth in the less-developed world. As death rates be steadily driven down, the individual miracle of birth becomes a collective tragedy of want."

Two federal reports by the President's Council of Economic Advisers and the Social Security Administration covered medical costs and overall national spending for health care.

The annual report of the economic council conceded that the "true" increase in medical costs may have been less than the dollar increase. The report said: "In the most recent 5 years, medical costs have risen less rapidly than during the 1950's. This has been due primarily to the fact that prices of prescriptions and drugs have been declining. Also, the increase in charges for medical services, including doctors' and dentists' fees, eye examinations and eyeglasses, and hospital rates, has slowed down in comparison with the earlier period.

"The higher hospital and doctor charges reflected in the consumer price index may overstate the true increase in the cost of medical care when account is taken of the rising effectiveness of the care received. With the dramatic improvements in medical technology that have taken place over the postwar period, many patients get more real 'service' from each day's stay in the hospital, or each visit to the doctor, than before."

The Social Security Administration reported that the nation spent \$36.8 billion in 1964 for health care, almost tripling the \$12.9 billion spent in 1950. Per capita expenditures more than doubled in the 15 year period, rising from \$84 to \$191 per person. Over 90 percent of the 1964 expenditures were for health services and supplies. The balance was spent for medical research and construction of medical facilities.

There was a considerable shift in method of payment for personal health services from direct out-of-pocket payments to third-party payments. Payments by third parties which include insurance benefits, government payments and philanthropic payments, met slightly over one-third of

the personal health care expenditures in 1950 and almost half of these expenditures in 1964. Government payments continued to provide about 22 percent of the funds for all personal health services.

The Justice Department has ordered coordination of federal procedures to assure that medical facilities and institutions of higher learning which receive government funds do not practice racial discrimination. The Department of Health, Education and Welfare was assigned the main responsibilities, including:

—Preparing and distributing a compliance form to be submitted by all medical facilities and institutions of higher learning which receive federal money, and evaluating the submitted forms.

—Conducting periodic reviews of recipients and investigating any discrimination complaints against them.

—Attempting to secure voluntary compliance and notifying other departments and agencies when any such effort fails.

## MEDICAL NEWS IN TENNESSEE

### Annual Heart Symposium

The 15th Annual Heart Symposium, sponsored by the Chattanooga Area Heart Association and the Heart Disease Control Program of the State Department of Public Health, in cooperation with the Chattanooga and Hamilton County Medical Society was presented on February 3rd. Speakers included: Dr. Robert L. Flynn, Assistant Chief, Coronary Heart Disease Section, Division of Chronic Diseases, U. S. Department of Public Health, Washington; Dr. Paul Maurice Zoll, Clinical Professor of Medicine, Harvard Medical School, Brookline; and Dr. Donald B. Effler, Chief of the Department of Thoracic and Cardiovascular Surgery of the Cleveland Clinic Foundation, Cleveland.

A social hour and banquet was held at the Patten Hotel where those attending heard a presentation entitled, "Treatment of Patients after Recovery from Myocardial Infarction" by Dr. Charles A. R. Conner, Associate Professor of Clinical Medicine

**to help relieve pain  
in common  
anorectal disorders**

# "non-caine" **Diothane®**

Diothane—with its chemically distinct "non-caine" anesthetic agent diperodon—provides effective temporary topical anesthetic and emollient actions for soothing relief of anorectal pain. Anesthetic activity is effective and relatively prolonged; sensitization is infrequent. Reports to Merrell on 1,500 patients treated pre- and postoperatively with Diothane Ointment, indicate only 22 developed local skin reactions. Reactions to Diothane have been burning or stinging sensations and a few cases of allergic manifestations. An additional advantage: Diothane Ointment and Suppositories are mildly antiseptic. Prescribe or recommend either form...both are now available.

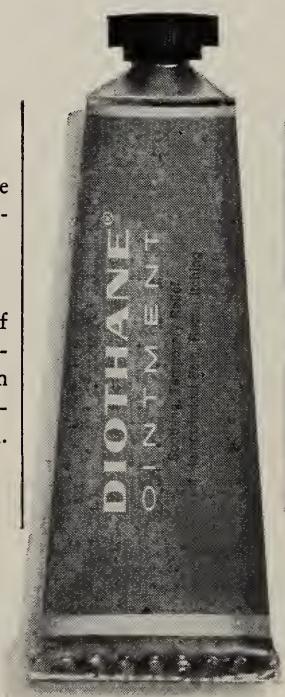
**DIOTHANE OINTMENT**

**COMPOSITION:**

diperodon 1.0%; oxyquinoline benzoate 0.1% in a special ointment base.

**INDICATIONS:**

Provides temporary palliation of pain that may result from hemorrhoidectomy and from common anorectal disorders such as hemorrhoids, anal fissures, pruritus ani.



**DIOTHANE SUPPOSITORIES**

**COMPOSITION:**

Each suppository, weighing approximately 2.6 Gm., contains diperodon 1.0%; urea 10.0%; oxyquinoline benzoate 0.1% in a special hydrophilic suppository base. A unique shape keeps the suppository in intimate contact with mucous membranes.

**INDICATIONS:**

Provide for temporary palliation of pain caused by hemorrhoids and pruritus ani.

**Merrell**

THE WM. S. MERRELL COMPANY  
Division of Richardson-Merrell Inc.  
Cincinnati, Ohio 45215/Weston, Ontario

and Attending Physician, New York University School of Medicine and University and Bellevue Hospitals, New York.

### Vanderbilt University School of Medicine

A \$59,074 Public Health Service grant to further research in heart disease has been awarded to Dr. George V. Mann, of the Departments of Biochemistry, Medicine and Nutrition. Dr. Mann is directing a research project in coronary risks factors and exercise.



A \$100,000 grant was received from the Helene Fuld Health Foundation in Trenton, New Jersey, to help finance construction of a student health center and Helene Fuld Clinic for student nurses. The three-story center, under construction near Vanderbilt University Hospital, will contain an outpatient clinic, mental health clinic, examining rooms and other teaching aids including rooms for seminars, guidance and counseling. Completion of the building is expected in March, 1967.

### Meharry Medical College

A \$12,000 a year psychiatric residency program has been established, supported in part by a grant from the National Institute of Mental Health. It offers stipends of up to \$12,000 a year in four positions available each year. The program is approved by the American Board of Psychiatry and Neurology and the A.M.A. Council on Medical Education. The goal of the residency is to give trainees a broad-based education in psychiatry with more intensive training in analytically-oriented therapy. Emphasis will be placed on the needs of the trainee rather than the needs of the service.

### St. Jude Children's Research Hospital

The Hospital has transferred its cooperative chemotherapy group membership from Leukemia Study Group B to the Southwest Cancer Chemotherapy Study Group. Both of the groups work under the auspices of the National Institutes of Health to further research on and development of new concepts in the use of drugs in treatment of

malignancies. St. Jude's transfer from Study Group B, consisting primarily of northeastern institutions, to the Southwest group was prompted by the institution's desires to make further contributions to medical research in the south.



Three members of the faculty of the University of Tennessee College of Medicine have accepted appointments to the voluntary consulting staff of St. Jude Children's Hospital. They are: Dr. Roger L. Hiatt, assistant professor of ophthalmology; Dr. Sam P. Patterson, assistant professor of obstetrics and gynecology, and Dr. Howard B. Hasen, assistant professor of clinical urology.

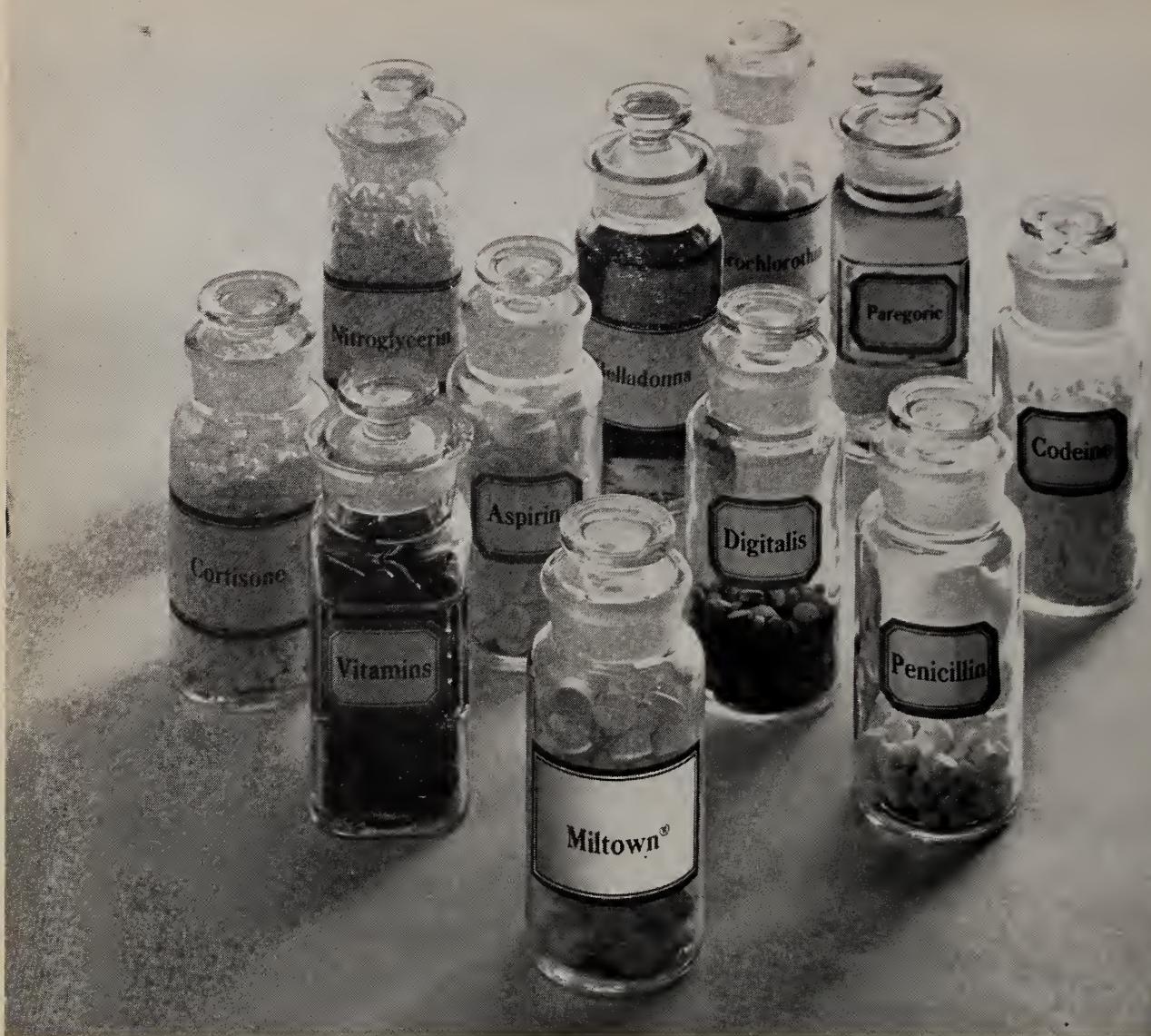
### Memphis Heart Association

Dr. Michael E. DeBakey, of Baylor University College of Medicine, Houston, gave the annual William B. Pollard Memorial Lecture for the Memphis Heart Association on February 4th. Dr. DeBakey is chairman of the Commission on Heart Disease, Cancer and Stroke by appointment of the President, and adviser and chief spokesman for the proposed regional medical complexes under this plan.

### Nashville Continues to Expand as Major Medical Center

Nashville has developed into a city with a 3,000 bed medical center and medical facilities in the area continue to expand. Nashville Memorial Hospital with 211 beds, opened in 1965. Baptist Hospital is now building a major 300-bed expansion; Park View Hospital, founded primarily as a convalescent facility, completed an expansion program recently and announced its new function as a medical-care unit; and St. Thomas Hospital is in the process of selecting a site for a new, larger hospital complex.

Hospitals which make a major contribution to the 3,000 beds for medical care in the Nashville area include: Baptist with a future capacity of 625; Vanderbilt with 502; Veterans Administration with 498; St. Thomas with a present capacity of 329; General with 240; Hubbard with 260; Madi-



## An eminent role in medical practice

- Clinicians throughout the world consider meprobamate a therapeutic standard in the management of anxiety and tension.
- The high safety-efficacy ratio of 'Miltown' has been demonstrated by more than a decade of clinical use.

# Miltown® (meprobamate)

**Indications:** 'Miltown' (meprobamate) is effective in relief of anxiety and tension states. Also as adjunctive therapy when anxiety may be a causative or otherwise disturbing factor. Although not a hypnotic, 'Miltown' fosters normal sleep through both its anti-anxiety and muscle-relaxant properties.

**Contraindications:** Previous allergic or idiosyncratic reactions to meprobamate or meprobamate-containing drugs.

**Precautions:** Careful supervision of dose and amounts prescribed is advised. Consider possibility of dependence, particularly in patients with history of drug or alcohol addiction; withdraw gradually after use for weeks or months at excessive dosage. Abrupt withdrawal may precipitate recurrence of pre-existing symptoms, or withdrawal reactions including, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, the dose should be reduced and operation of motor vehicles or machinery or other activity requiring alertness should be avoided if these symptoms are present. Effects of excessive alcohol may

possibly be increased by meprobamate. Grand mal seizures may be precipitated in persons suffering from both grand and petit mal. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

**Side effects:** Drowsiness may occur and, rarely, ataxia, usually controlled by decreasing the dose. Allergic or idiosyncratic reactions are rare, generally developing after one to four doses. Mild reactions are characterized by an urticarial or erythematous, maculopapular rash. Acute nonthrombocytopenic purpura with peripheral edema and fever, transient leukopenia, and a single case of fatal bullous dermatitis after administration of meprobamate and prednisolone have been reported. More severe and very

rare cases of hypersensitivity may produce fever, chills, fainting spells, angioneurotic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, anaphylaxis, stomatitis and proctitis. Treatment should be symptomatic in such cases, and the drug should not be reinstated. Isolated cases of agranulocytosis, thrombocytopenic purpura, and a single fatal instance of aplastic anemia have been reported, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity has been reported, usually after excessive meprobamate dosage. Suicidal attempts may produce lethargy, stupor, ataxia, coma, shock, vasomotor and respiratory collapse.

**Usual adult dosage:** One or two 400 mg. tablets three times daily. Doses above 2400 mg. daily are not recommended.

**Supplied:** In two strengths: 400 mg. scored tablets and 200 mg. coated tablets.

*Before prescribing, consult package circular.*

**WALLACE LABORATORIES**  
Cranbury, N.J.

son with 227; Parkview with 200 and Nashville Memorial with 211.

## Department of Public Health

*Memorandum:* From R. H. Hutcheson, Commissioner

### Subject: Falciparum Malaria

Several recent news releases and an editorial in the J.A.M.A. have pointed to the occurrence of falciparum malaria among military personnel in South Vietnam and the resistance of these parasites to the newer antimalarial drugs. During 1965, four cases, with an onset after November 15, among military personnel returning to the United States were reported to the Public Health Service. Two of these patients died. In addition one case has been reported recently in Tennessee.

It would be very easy to re-introduce this infection into mosquitoes in the state. For this reason it is requested that all cases of malaria encountered be reported promptly to the local health department so that mosquito control measures may be instituted immediately in areas around the homes of the patients.

The following chemotherapy is being used by military authorities at this time:

(1) In cases of previously untreated falciparum malaria, the standard chloroquine regimen consisting of an initial dose of chloroquine phosphate, 1.0 Gm. (600 mg. of base), followed by 0.5 Gm. (300 mg. of base) 6 hours later, and then 0.5 Gm. once daily for the next 2 successive days for a total dose of 2.5 Gm. (1.5 Gm. of base) of chloroquine phosphate in 3 days is given. If the patient is unable to take or retain chloroquine given orally, the drug may be given as the hydrochloride, 250 mg. intramuscularly, and repeated in 6 hours, switching as soon as possible to the oral medication. This regimen should be employed initially for patients with any type of malaria who are not critically ill and for whom the history does not indicate that such a course of therapy has already been administered.

(2) In patients with P. falciparum malaria who (a) are gravely ill, or (b) have not responded to the chloroquine treatment described above, or (c) have a recrudescence despite a previous response to a course of chloroquine, the treatment of choice is quinine. This is administered as quinine sulfate 0.65 Gm. (2 tablets of 5 grains each) every 8 hours for 7 to 10 days. Because of a variable tendency to develop postural hypotension, patients should be kept at bed rest during quinine administration. The urine output should

be measured and if oliguria develops, quinine should be temporarily discontinued. During oliguria, quinine blood levels may rise precipitously and acute quinine toxicity may ensue.

(3) If the patient is unable to retain quinine because of vomiting, or when in coma presumed due to falciparum malaria, the drug may be given intravenously. It must be emphasized that this treatment carries a *serious hazard* and should be resorted to only when the patient's condition clearly warrants the risk and no other form of treatment is possible. Quinine is administered intravenously as the dihydrochloride, 600 mg. in 600 cc. of normal saline, by *very slow* intravenous drip with constant monitoring of the blood pressure and the pulse to detect hypotension or arrhythmia. The same intravenous dose may be repeated at intervals of 8 hours if the patient's condition requires. Oral therapy, by stomach tube if necessary, should be utilized as soon as possible.

(4) Patients who respond to quinine therapy but later have recrudescence should be retreated with quinine as described above. If necessary, the course of quinine may be maintained for 21 days at a dosage of 0.65 Gm. (10 grains) every 8 hours, as tolerated.

(5) If asexual parasites persist during quinine therapy, regardless of the clinical response, the patient should receive a course of pyrimethamine (Daraprim), 50 mg. daily for *three days* concurrently with sulfadiazine, 0.5 Gm. every 6 hours for 5 days. Careful attention should be given to maintaining adequate hydration during this therapy.

## Editorial. Medical Quackery

"Physicians, as conservators of the public health, are bound to bear emphatic testimony against quackery in all its forms."

Is this a quote from proceedings of the American Medical Association's Clinical Convention in Philadelphia in December?

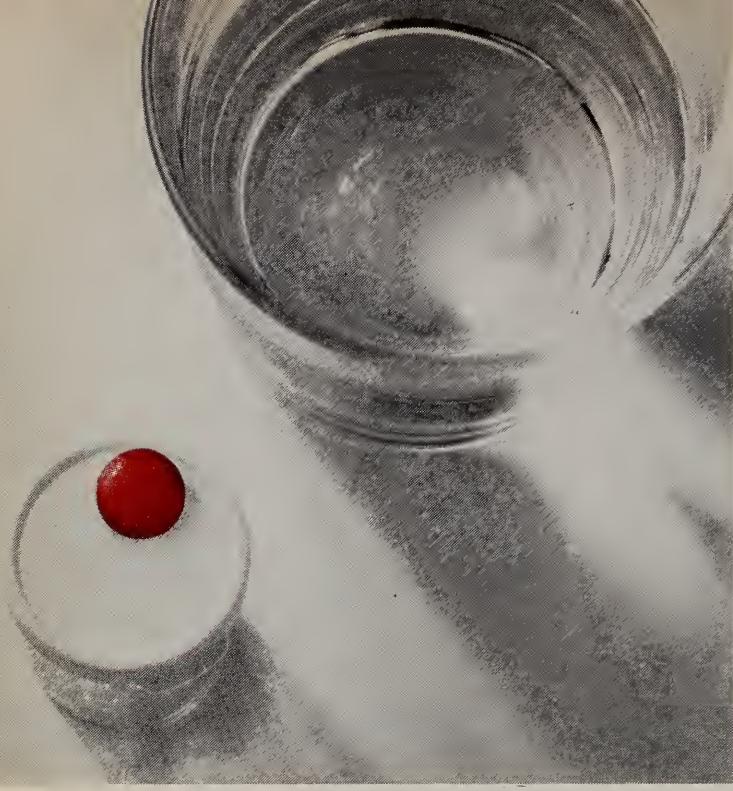
The meeting was in Philadelphia, but the year was 1847!

So you see, from its very inception 118 years ago, the American Medical Association has been battling quackery and it is dedicated to a continuation of this warfare against wasting the nation's health and its health care dollar . . . of fighting fraud at the bedside of ill and desperate people.

For, as long as there are human beings, there will be human nature . . . and quacks—pretenders to ability they don't possess—to take advantage of the fact.

The health quack is not so easy to spot these days. The stovepipe hat and the pitchman's hawking have gone. In their place are their space-age counterparts, the suave, apparently-so-phisticated super salesmen with the Madison Avenue manners.

These merchants of menace, more insidious and unscrupulous than ever, have many new products,



one mid-morning



one mid-evening

# New 300 mg tablet It's made for b.i.d.

**For Adults**—2 tablets provide a full 24 hours of therapy...with all the extra benefits of DECLOMYCIN...lower mg intake per day...proven potency...1-2 days' "extra" activity to protect against relapse or secondary infection.

# DECLOMYCIN<sup>®</sup> DEMETHYLCHLORTETRACYCLINE 300mg FILM COATED TABLETS

*Effective* in a wide range of everyday infections—respiratory, urinary tract and others—in the young and aged—the acutely or chronically ill—when the offending organisms are tetracycline-sensitive.

*Warning*—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients

should avoid direct exposure to sunlight and discontinue drug at the first evidence of discomfort.

*Precautions and Side Effects*—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanelles has been observed. All signs and symptoms have disappeared rapidly upon cessation of

treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

*Average Adult Daily Dosage:* 150 mg q.i.d. or 300 mg b.i.d. should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

*Capsules:* 150 mg of demethylchlortetracycline HCl.

*Tablets:* film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.

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worthless diet fads, worthless food supplements, worthless cosmetic devices and treatments, worthless "cures" for everything—even into the area of brain-damaged children and other mental illness.

They bilk the undiscerning—the uninformed, the desperate, the unsuspecting of all ages—of millions of dollars a year. The estimates of the costs of medical quackery are at best calculated guesses, but they have gone as high as a billion dollars a year. And one authority in the field of quack-fighting has stated that "medical quackery each year costs more lives than all crimes in the United States."

It is this cost of life—and health—that has placed America's physicians in the front lines of the war on quacks. It is the insidious side effect of quackery with which medicine concerns itself—the delay in proper medical care that may cost life itself.

It is for this reason, too, that the medical profession is dedicated to education of the people about cultism—chiropractic and the other health sects that turn their backs on scientific medicine.

The House of Delegates of the American Medical Association said in 1933:

"Either the theories and practices of scientific medicine are right and those of the cultists are wrong, or the theories and practices of the cultists are right and those of scientific medicine are wrong."

And in 1961, it said:

"There can never be a majority party and a minority party in any science . . ."

After the quack or the cultist has extracted his pound of flesh—after the damage is done and after the sick may have become the dying because of the delay in proper care—scientific medicine usually is called upon to pick up the pieces.

Medicine has tried and will continue to try to do that job, too, but how much easier the job would have been—how many lives would have been saved—if . . . (From the Department of Investigation, American Medical Association.)

## PERSONAL NEWS

The Montgomery County Board of Health sponsored a dinner on January 25th honoring **Dr. Mack M. Green**, retiring public health officer for the Hudson Memorial Health Center District. An engraved silver tray was presented to Dr. Green by the Montgomery County Medical Society. The Society also adopted a resolution citing Dr. Green's many outstanding accomplishments during his tenure as public health officer. Dr. Green's retirement became effective March 1st.

**Dr. A. Pat Kelly**, Fountain City, has opened an office in Jefferson City for the practice of general medicine. At present, Dr. Kelley will also maintain an office in Fountain City.

**Dr. Fred C. Wallace**, Memphis, has been named chief of staff of Memphis Eye, Ear, Nose and

Throat Hospital, succeeding **Dr. William F. Murr rah**.

**Dr. Joe F. Bryant** has been named Lebanon's Outstanding Young Man of 1965, and presented the Distinguished Service Award by the Lebanon Junior Chamber of Commerce.

**Dr. Kenneth W. Marmon** has opened his office for the practice of pediatrics in Maryville.

**Dr. N. L. Hyatt**, Covington, has been named president of the medical staff of Tipton County Memorial Hospital. **Dr. J. S. Ruffin** was named secretary.

**Dr. L. C. Ogle** was elected president of the Memphis Obstetrical and Gynecological Society at the group's annual meeting on January 15th. Other officers for 1966 are: Dr. Finis Taylor, vice-president; **Dr. Charles Workman**, secretary; and **Dr. Harry Wilson**, treasurer.

**Dr. Thomas M. Minor** has joined the staff of Nobles Memorial Hospital in Paris. Dr. Minor will specialize in general surgery, including thoracic and cardiovascular surgery.

**Dr. John C. Turley** has been elected president of the Memphis Ear, Nose and Throat Society. Other officers are: **Dr. Thomas M. Jackson**, vice-president, and **Dr. Thomas Magruda**, secretary-treasurer.

**Dr. James Edward Tinnell** is now associated with Dr. J. C. Leonard at Leonard's Hospital in Lewisburg.

**Dr. Walter Griffey, Jr.**, Paris, has been elected president of the Henry County Heart Council.

**Dr. Charles C. Stauffer** has been elected chief of staff of the Jackson-Madison County General Hospital. **Dr. Thomas K. Ballard** was named assistant chief of staff. Ten physicians have been named to the medical staff executive committee along with Dr. Stauffer and Dr. Ballard. They are: **Dr. George B. Wyatt**, medicine; **Dr. Earl Williamson**, surgery; **Dr. Allen Truex**, obstetrics and gynecology; **Dr. James A. Phillips**, general practice; **Dr. C. V. Alexander, Jr.**, radiology; **Dr. Henry Moore**, anesthesiology; and **Dr. Baker Hubbard** and **Dr. Oliver H. Graves**, members-at-large.

**Dr. Fred M. Valentine, Jr.** has been re-elected president of the Newport Chamber of Commerce for 1966.

**Dr. J. Warren Kyle** announces the relocation of his office to 1049 Madison Avenue in Memphis. His practice is limited to internal medicine.

## ANNOUNCEMENTS

### Teachers of Family Medical Practice To Train Under New Grant at Kansas University

Two fellowships to train teachers of family medical practice have been established at the University of Kansas School of Medicine, under a grant from the American



## Butazolidin® alka      Usually works within 3 to 4 days in osteoarthritis

phenylbutazone	100 mg.
dried aluminum hydroxide gel	100 mg.
magnesium trisilicate	150 mg.
homatropine	
methylbromide	1.25 mg.

The trial period need not exceed 1 week. In contrast, the recommended trial period for indomethacin is *at least 1 month*.

That's why it's logical to start therapy with Butazolidin alka—you'll know quickly whether or not it works. And usually, it will.

A large number of investigators have reported major improvement in about 75% of cases. Some patients have gone into remission. Relief of stiffness and pain may be followed quickly by improved function and resolution of other signs of inflammation. And Butazolidin alka is well tolerated, especially since it contains antacids and an antispasmodic to minimize gastric upset.

### Contraindications

Edema, danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile, or when other potent drugs are given concurrently. Large doses are contraindicated in patients with glaucoma.

### Precautions

Obtain a detailed history and a complete physical and laboratory examination, includ-

ing a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Make regular blood counts. Use greater care in the elderly.

### Warning

If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy.

### Adverse Reactions

The most common are nausea, edema and drug rash. Hemodilution may cause moderate fall in red cell count. The drug may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss

have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

### Dosage

The initial daily dosage in adults is 300-600 mg. daily in divided doses. In most instances, 400 mg. daily is sufficient. When improvement occurs, dosage should be decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

Also available: Butazolidin®, brand of phenylbutazone  
Tablets of 100 mg.



Geigy Pharmaceuticals  
Division of Geigy Chemical Corporation  
Ardsley, New York

BU-3804 P

# Geigy

Academy of General Practice Foundation. The fellowships were announced today by Dr. C. Arden Miller, dean of the Kansas school. The grant making the positions and program possible is for \$73,600 and covers a period of two years. The AAGP Foundation, whose headquarters are in Kansas City, was established to receive and administer funds to improve the teaching and practice of family medicine. Its president is Dr. John Walsh, Sacramento, Calif.

In his announcement, Dr. Miller said the fellowships would be used "to support and train two young physicians to become qualified as teachers in family practice . . . with particular emphasis on faculty organization and administration."

Dr. Jesse D. Rising will serve as project director and Drs. Jack Walker and Charles Lewis as co-directors. All are regular faculty members.

Mac F. Cahal, secretary-treasurer of the AAGP Foundation, described the fellowship as "an all-important seeding operation for what is expected to become a basic and vital segment of medical education in the next several decades."

### Courses to be Offered by U.T. in 1966

Continuing Education Courses to be presented by the University of Tennessee College of Medicine in 1966 are:

April 13-15	Surgery of the Gastrointestinal Tract
April 27-28	Emotional Problems of Youth—Diagnosis and Treatment with Emphasis on Psychotherapeutic Medicine
May 11-13	Gastroenterology—Endocrinology (Kingsport, Tenn.)
May 18-20	Pediatric Allergy
May 25-27	Cardiology—Rheumatology
August 17-19	Peripheral Vascular Disease
Sept. 29-30	Cardiology (Knoxville, Tenn.)
Oct. 13-15	Radiology (Knoxville, Tenn.)
Nov. 10-12	Orthopedics (Knoxville, Tenn.)
November 18-19	Medical Surgical Management of the Gastrointestinal Tract (Knoxville, Tennessee)

All courses, unless otherwise indicated, will be held at The University of Tennessee College of Medicine, Memphis. Applications should be made to the Department of Continuing Education, The University of Tennessee Medical Units, 62 South Dunlap Street, Memphis, Tennessee (38103).

### Heart Association Booklets Available

The "Jones Criteria for Guidance in the Diagnosis of Rheumatic Fever" have been re-issued

by the American Heart Association in a revised and expanded edition. Originally published in 1944 it has subsequently been revised and modified. The present edition, an 8 page leaflet in format, is organized under the main headings of "Major Manifestations," "Minor Manifestations," "Supporting Evidence of Streptococcal Infection," "Murmurs Indicating Carditis" and "Over-Diagnosis of Rheumatic Fever."

The first of three simplified leaflets based on the Heart Association's sodium-restricted diet booklets is now available to physicians. Entitled "Sodium Restricted Diet, 500 Milligrams," the leaflet was developed in cooperation with the Heart Disease Control Program of the U. S. Public Health Service and The American Dietetic Association. These booklets are available from local Heart Associations.

### Chest Physicians Plan International Congress

The Ninth International Congress on Diseases of the Chest, sponsored by the Council on International Affairs of the American College of Chest Physicians, will be held in Copenhagen, Denmark, August 20-25, 1966.

The Congress will be presented by the College with the cooperation of the medical societies of Institute of the University of Copenhagen. Additional information may be obtained by writing to Mr. Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago, Illinois 60611.

### Calendar of Meetings, 1966

#### State

April 17-19	Tennessee Medical Association Annual Meeting, Civic Center Auditorium, Gatlinburg
May 19	Middle Tennessee Medical Association, 143rd Semi-annual Meeting, Shelbyville

#### Regional

March 29-30	Southwestern Pediatric Society, Statler Hilton Hotel, Los Angeles
April 13-16	West Virginia Academy of Ophthalmology and Otolaryngology, Annual Meeting, Greenbrier Hotel, White Sulphur Springs, West Va.
April 18-21	Southwestern Surgical Congress, Flamingo Hotel, Las Vegas

#### National

April 14-19	American Dermatological Association (members only), Homestead Hotel, Hot Springs, Va.
April 15-17	American Society of Internal Medicine, Biltmore Hotel, New York
April 18-19	American Otological Society, Americana Hotel, San Juan, P.R.



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April 18-22	American College of Physicians, Hilton and Americana Hotels, New York
April 23-24	American Laryngological Association, Americana Hotel, San Juan, P.R.
April 25-29	American College of Allergists, Palmer House, Chicago
April 25-30	American Academy of Neurology, Bellevue-Stratford Hotel, Philadelphia
April 27-29	American Association of Plastic Surgeons, Sheraton-Cleveland, Cleveland
May 1-5	American College of Obstetricians and Gynecologists, Palmer House, Chicago
May 7-8	American Academy of General Practice—State Officers Conference, Muehlebach Hotel, Kansas City
May 9-13	American Psychiatric Association, The Traymore, Atlantic City, New Jersey
May 22-25	American Thoracic Society, Hilton Hotel, San Francisco
May 22-26	American Orthopaedic Association, Broadmoor Hotel, Colorado Springs, Colo.
May 26-28	American Gastroenterological Association, Drake Hotel, Chicago
May 30-June 1	American Ophthalmological Society (members only), The Greenbrier, White Sulphur Springs, West Va.
May 30-June 2	American Urological Association, Palmer House, Chicago
June 2-4	American Gynecological Society, The Homestead, Hot Springs, Va.
June 13-15	American Neurological Association, Sheraton-Park Hotel, Washington, D. C.
June 20-23	American Proctologic Society, Sheraton-Cleveland Hotel, Cleveland
June 23-27	American College of Chest Physicians, Sheraton-Chicago Hotel, Chicago
June 25-26	American Diabetes Association, LaSalle Hotel, Chicago
June 26-30	American Medical Association, Chicago

### Internists to Hold Annual Meeting in New York City

The nation's specialists in internal medicine will assemble in New York City, April 18-22, for the 47th annual meeting of the American College of Physicians. Five days of scientific sessions will be held at the Americana and New York Hilton hotels with presentations by more than 300 medical scientists. Among the highlights will be award

lectures by international experts in the fields of liver disease, cardiology, cellular replacement, cholera and dietary protein deficiency. Information on late developments in the diagnosis and treatment of diseases will be offered via plenary sessions, panel discussions, special lectures, closed-circuit television programs, basic science and clinical-investigation presentations. For information: Edward C. Rosenow, Jr., M.D., 4200 Pine Street, Philadelphia, Pa. 19104.

## BOOK REVIEW

**Cellular Biology of Myxovirus Infections. A Ciba Foundation Symposium.** Edited by G. E. W. Wolstenholme and Julie Knight. 354 pages, 81 illustrations. Boston: Little, Brown and Company 1965. Price \$12.00.

This International Symposium was held in February, 1964, and the participants were selected from the most active persons in several fields of investigation touching on the myxoviruses.

This group of viruses is heterogeneous. Myxoviruses have an outer protein coat and a RNA core and cause many mammalian and avian diseases, the best known of which are measles, mumps and influenza. Viruses of this group have been studied by virologic, immunologic and epidemiologic techniques since the early days of virology. As new technical advances have been made, myxoviruses have been studied in great detail and depth. The most recent of these studies are reported in this volume.

The presentations are mostly clear, well illustrated and amply documented. Unsettled, unclear, and dubious points are brought out in the excellent discussions, so that present limits of knowledge are well defined and the work remaining to be done is strongly emphasized.

The first group of reports deals with correlations of structure and function of the viruses, their precursors, their components and their host cells. Normally-produced cellular components have been shown to be important in the final constitution of the mature virus particle, and the dependence of some of the myxoviruses on normal cellular functions are emphasized. In this respect, myxoviruses differ in degree from one another, some being more dependent than other on host-cell DNA function. However, they differ in kind from other RNA viruses and many DNA viruses, in that the others depend very little, if at all, on host-cell DNA-directed functions for their reproduction. They also differ in kind from those viruses which transform their hosts into "tumor cells" and do not form new viruses in the normal course of infection.

There are several reports dealing with the formation of "incomplete" virus particles. These are

(Continued on page 293)

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measures taken. Use on infected areas should be attended with caution and observation, bearing in mind the potential spreading of infection and the advisability of discontinuing therapy and/or initiating antibacterial measures. Generalized dermatological conditions may require systemic corticosteroid therapy. Steroid therapy, although responsible for remissions of dermatoses, especially of allergic origin cannot be expected to prevent recurrence. The use over extensive body areas, with or without occlusive nonpermeable dressings, may result in systemic absorption. Appropriate precautions should be taken. When occlusive nonpermeable dressings are used, miliaria, folliculitis and pyoderma will sometimes develop. Localized atrophy and striae have been reported with the use of steroids by the occlusive technique. When occlusive nonpermeable dressings are used, the physician should be aware of the hazards of suffocation and flammability. The safety of use on pregnant patients has not been firmly established. Thus, do not use in large amounts or for long periods of time on pregnant patients.

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**Book Review***(Continued from page 291)*

incomplete in the sense that they cannot initiate an infectious cycle. At least two and perhaps more kinds of incomplete viruses may be produced by cells infected with myxoviruses, and these differences are discussed at length.

Genetic features of the influenza viruses are discussed and it is clear that the phenomena

called "genetic" are not strictly of the kind familiar to most of us. In addition, the immunologic features of myxoviruses and myxovirus infection are the subject of several presentations and much enlightening discussion and important points bearing on vaccine development are brought out.

This book is best suited to microbiologists and graduate students of microbiology, and would be worth the reading for persons interested in clinical infectious diseases and immunology.

\* \* \*

**Medical Digest***(Continued from page 266)*

This activity has to do with the federal program on development and establishment of regional medical centers in Tennessee.

- The Board approved recommendations presented by the Committee on Laboratories and Blood Banks and directed that the report be presented to the House of Delegates . . . Accepted the invitation to conduct the 1968 annual meeting in Chattanooga . . . Reviewed the VA Hometown Care Program for service connected illness and disability cases of veterans . . . Heard a report from the Chairman of the Health Insurance Committee . . . Approved a proposed Conference between representatives of TMA and the Tennessee Hospital Service Association . . . Heard a report from the AMA Clinical Meeting and a Report from the TMA Committee on Exhibits . . . Selected nominees for the State Board of Nursing . . . Approved an increase in TMA Journal Advertising rates effective January 1, 1967 . . . Gave final approval to a resolution to be introduced in the House of Delegates by the Chairman of the Board for an increase in TMA dues . . . Approved additional insurance coverage on the TMA headquarters building and reappointed the Auditor and Attorney for TMA . . . Accepted reports from the Chairman of the Committees on Hospitals and on Legislation.

- Health, Education and Welfare Department has named Equitable Life Assurance Society of the United States to be the fiscal intermediary in Tennessee for the Medicare Act, Part B, covering payments to physicians.

**Other Actions—****NOTE:**

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## Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville 12, Tennessee.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

R. H. KAMPMEIER, M.D., Editor

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# Journal of the Tennessee Medical Association

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No. 4

One remains constantly amazed at the lack of knowledge of a segment of the medical profession in the matters and functions of organized medicine. The secret of this ignorance obviously is, as is true of so many items which touch our daily life, that much is taken for granted without analyzing from where it stems. Police and fire protection, a public school system, income tax, Social Security—these are facts of everyday life. From whence derives much of the approval of hospitals, interne and residency programs, surveillance of drugs, control of nostrums and cosmetics, and many other items too numerous to mention. Only the 800 or so men of knowledge, many of them full time faculty of our schools, who give of their time gratis to the AMA Councils and Commissions and Committees know of these details. To whom do our Congressmen turn for specialized knowledge in medicine but to the AMA Washington office. To whom is HEW turning for advice on the rules of Medicare—the AMA.

Who carries the burden of the multifaceted problems of third-party contracts and insurance in Tennessee—TMA answers many telephone calls and letters. Who will need to answer the flood of questions when Medicare's impact is felt—the law delegates this to the county and state medical associations.

Though the following papers were prepared for the officers of the county medical societies they will bear reading by those who somehow think of county and state societies as clubs of those who like to "play politics."

## SYMPOSIUM ON THE PROPER ROLE AND RESPONSIBILITIES OF COUNTY, STATE AND NATIONAL MEDICAL GROUPS

### Introduction

G. BAKER HUBBARD, M.D.,\* Jackson, Tenn.

If I accomplish what I would like to do in these introductory remarks, I hope you will not refrain from reading the four talks that immediately follow. They were given at the Tennessee Medical Association's State and County Officer's Conference in Nashville, Sunday, the 27th of February.

If you read these talks, you are taking a great risk of being influenced in changing your views of organized medicine. You could be influenced to give of not only your time and talent, but your thoughts which are so badly needed by organized medicine. This time giving will hit you

where it hurts the most, and that is your pocketbook. After all you have nothing to sell except your time, and we all are very selfish with our time and rightfully so to reserve it for the contribution where we think it is the most needed.

I am amused when I hear a member objecting to the \$15.00 raise in dues that is needed by our Tennessee Medical Association. How much time would you have to donate to the Tennessee Medical Association or your local society for it to cost you \$15.00. Would it be 30 minutes or maybe one hour? What we need is your time and thoughts and it will be costly to you, but

\*President-elect, Tennessee Medical Association.

oh! the rewards are ten-fold and I know this personally. For ten years I practiced surgery in Jackson and gave nothing of my time, either to the local society or to the state association, and I can say that the last ten years have been much more rewarding than those first ten selfish years.

Dr. Roy Tyrer, an outstanding neurosurgeon and a busy one, donates a great part of himself to civic and Tennessee Medical Association needs. He delivered a talk that really described his motivation. I hope it is catching. He not only tells the need of a local medical society, but prescribes the answers in as a proficient manner that is equal to the care of his own patients. I challenge you to read his talk and try not to participate.

Dr. John Burkhart is the Tennessee Medical Association's president. Who is more capable of presenting the proper role and responsibility of state medical groups. Being very articulate, he has been able to express himself where I sense my inadequacies and made me feel so ashamed not only about my efforts but my knowledge at the state level. Why not read his talk and try not to digest it? See if you can read it and not feel a little more guilty in what you have given of yourself.

Mr. Leo E. Brown presented the role of the national group. The magnitude of the problems of the AMA are so great and var-

ied in their needs and services to you that no one could do them justice in twenty minutes. Mr. Brown did an exceptional job and I believe you will be surprised at the services rendered for you by AMA. Mr. Brown is the assistant to Dr. Blasingame, who is, as you know, the executive vice-president who runs the AMA and who should be more knowledgeable than Mr. Leo Brown. As you read this talk, think of the criticisms that you may have made of the AMA and if this does not answer your questions, please let us "trouble-shoot" them for you.

Mr. C. Lincoln Williston is one of the leading state medical executive secretaries or directors. He is the Executive Secretary of the Texas Medical Association which has over 10,000 members.

Apparently he has been staying up late at night thinking how to further stimulate his physicians. He has some good tricks and programs up his sleeve that he is fostering among the physicians of Texas. I really hope that you will only scan this talk because if you really read it, I doubt we could use at present all of you who will want to serve and participate.

My suggestion to you is to read these talks as soon as you can and possibly you will be one of the first to apply for service, will be the one selected for this honor, and will be able to receive the great rewards.

## The Role and Responsibility of the County Medical Society

A. ROY TYRER, JR., M.D.,\* Memphis, Tenn.

The role of the County Medical Society might be portrayed in many ways—

Perhaps as meaningful a way as any would be to describe it as the cornerstone about which are assembled a multitude of building blocks representing individual physicians, who in combination, provide the basic foundation on which the entire superstructure of organized medicine is built.

We might look at the County Society in still another way, and consider it the initial

synaptic center, through which afferent messages pass from the periphery of the profession to the higher cerebral centers of organized medicine, and likewise the final common pathway by which efferent messages are transmitted from these centers back to the terminal end organs, which again are represented by the individual physicians.

We could talk in metaphor and figures of speech for a long time, but cloaking the County Medical Society in architectural or anatomic terms is meaningless if we fail to

\*President of the Memphis Shelby County Medical Society

establish the basic fundamental as to how the County Society functions and what should be its goals and objectives.

There are in the United States some 294,000 physicians. In my judgment, every physician, without exception, should hold membership in a County Medical Society, be he maimed and blind, or the epitome of health, unless on the basis of moral character or professional ethics he does not deserve the stature of such association and recognition. As County Society officers, I consider it our responsibility to seek out those physicians who for one reason or another are not Society members, and see that they become members, active members, if you please.

We might digress here momentarily and consider types and categories of membership. I do not propose a lengthy review of this subject, for it could occupy several hours of discussion. The point I wish to make is that, in my judgment, all individuals having an M.D. degree, who are in good professional standing, should have an Active Membership status in the County Society, and in the spirit of democracy, should be on an equal basis with their colleagues. My comments do not relate to the issue of civil rights, but rather I refer to physicians engaged in the various categories and facets of medical practice, teaching, and research, as well as those physicians whose services may be completely governmental, as physicians active in the Armed Forces or with the Veterans Administration; also included are those physicians who function full-time on our faculties of medicine. The point I am making is that all physicians, the private practitioners of medicine and those working in these other categories, should be closely associated; and in the basic foundation of organized medicine, which is the County Medical Society, there should exist no categorization, but all should be *active*, participating members, interested in any medical matter which has an influence on the profession, and to which the County Medical Society addresses itself.

To accomplish this presents a problem. Any organization to be effective requires proper financing. In the case of organized

medicine, this support must basically come from the membership by way of dues. Income differences exist in the various types of medical practice referred to, but on the average these differences are probably far less than may prevail in the minds of many. Likewise, membership incentives differ between those practicing in those other categories of medicine. Also with respect to some of these groups, certain external motivating factors do not exist, such as the requirement of Medical Society membership for the procurement of malpractice insurance, or to confirm ethical qualification for hospital staff privileges. All of these differences must be recognized, and it is our obligation as Medical Society officers to resolve these differences so as to involve all physicians in organized medicine, which starts at the County Medical Society level, but does not stop short of the American Medical Association.

This latter statement brings in another major subject for discussion, which concerns our obligation as County Society officers to see that the membership which we represent supports not only the local Medical Society, but also supports sufficiently, adequately, and willingly the superstructure of organized medicine, for what effectiveness could we have as a profession represented by a fragmented group of dissociated societies. For these reasons, County Societies are banded together in State organizations, each County Society receiving its charter from the State Association, with specific obligation to pay dues to that Association. In no other way could our State Association be supported. The State Association in turn receives its charter from the American Medical Association. With this exists also an obligation for support. The national organization, appropriately in my judgment, gives the State association a wide range of autonomy, including the privilege of determining whether individual members of the County Societies shall or shall not be required to pay AMA dues. Some State associations, the total I think being about 17 of the 54 state or territorial associations, require the payment of AMA dues for membership. Tennessee is not one of these, thus one of our

medical colleagues can be a member of the County Society and the State Association and still not be a supporting, dues-paying member of the American Medical Association.

I do not propose that we get into a discussion of obligatory AMA dues for the physicians of this State. I personally think the AMA has acted wisely in leaving this option up to the State Associations, but I do believe there is much to be said in support of required AMA membership, as determined by the individual State Associations, for without such a requirement the laggard and the shirker within our profession can realize the same benefits as he who supports the American Medical Association not only with his money, but often gives that even more valuable commodity, his time, in support of organized medicine's many vital roles in today's society. The point I wish to make at this time is that I feel very strongly that you and I as officers and leaders of the County Society and the State Association have a very distinct responsibility to see to it that every physician, to the absolute extent of our abilities, is made aware of his obligation to organized medicine at the national level, and should be urged, without coercion, to assume membership in the AMA. I firmly believe that there is no justification in society membership limited to only a segment of organized medicine, and I think it is our obligation to sell this point, and swell the AMA membership from its present 71% of the profession, to a full, round 100 per cent. If we as a profession do not learn now how to travel together, we can never hope to reach any future vantage points.

Before leaving this subject, I would like to make brief reference to the proposed dues increase at both the state and national levels. There is a recommended TMA dues increase from \$40 to \$55, and a proposed increase in AMA dues from \$45 to \$70. I submit to you that no organization is stronger than its pocketbook, and whereas financial strength is no substitute for able leadership or a program of sterling quality, neither can the latter survive on merit alone without proper financing, and many a worthy cause has been lost in the abyss of yester-

day for lack of financial support. I believe organized medicine's position must be strong in this regard, and I report to you with all candor, that in my judgment one of the strongest pillars of Labor today is its pocketbook. The response of doctors to paying organizational dues I find baffling, even to the point of defying psychoanalysis. I think almost without exception other professions and trades, in comparison to income, pay proportionately more in support of their parent organizations than do physicians. Osteopaths and chiropractors pay \$100 in annual dues to their national organizations, and members of the International Chiropractic Association pay \$195 annually, not to mention airline pilots who pay 1.5% of their gross salary to the Air Line Pilots Association, less a 10% discount when payment is made on an annual basis. I say to you, as County Society leaders, we have an obligation to sell to our colleagues the fact that organized medicine's financial position must be strong, and this means payment of dues by all, with an expectation for periodic increase in these dues, as long as the present inflationary trend exists in our economy.

There are many subjects which could be discussed to advantage that time today will not permit. I would like to say, however, that every County Society should have a good organizational structure, and this merits periodic review. A society need not be bound by county perimeters in the areas where the physician population is too thin to establish an effective organization. In such instances counties or other geographic divisions should join in creating a strong local medical unit. I would like to suggest that a minimum membership in any local society should not be less than 25, if it is going to be effective and meaningful in its overall program. Here in Tennessee we have 34 societies that do not meet this requirement. I would also like to say that any effective organization must have certain standards and criteria for operation. In a medical society, this means a Constitution and By-Laws. Every Society should have such basic credentials and a copy of these should be on file with the State Association. To some this may seem a trite and unneces-

sary statement, but there are Societies within our State that do not meet this requirement. Model constitution and by-laws examples are available to assist those who might desire assistance.

An organization is no stronger than the leadership provided by its officers, so thoughtful and careful selection of the officers who will lead the affairs of the Society is important. Also, there needs to be established tenure of office, sufficient to provide a substantial acquaintance and knowledge regarding the activities of the Society, but short enough to assure continuing inflow of new interest and new vitality, avoiding any situation which would approach a lifetime tenure or long term control on the part of a few.

In committee appointments, deliberation and selectivity is essential in establishing the best combination between assignee and assignment. There are in any organization the "go-getters" and the "doers," who are out numbered many-fold by those who prefer to remain on the sidelines. It is common-place to appoint the doer whose work capacity and ability is known, to the exclusion of a member whose talents may be untried and untapped. Whereas key assignments must be given to those who have proven their ability, it is wise not to over-work a few to the point of excluding other members from "testing their wings." Also when a job is done well, proper recognition is deserved and should be accorded that individual.

One of the most difficult problems that faces organized medicine today, and a problem which is not unique to medicine, is that of acquainting the everyday practitioner of medicine, specialist and generalist alike, with the events affecting our profession and which are occurring with such whirlwind speed and in such mountainous volume as to defy the most ingenious communication expert or human computer. At the local level, this is our job to do in the best manner possible and it is one which I assure will tax your ingenuity. Don't be frustrated and throw up your hands—tackle the job and keep tackling it. Pay attention to the communiques that come to you repeatedly from the national and state offices, re-

view them in the light of your own society's situation, and above all, pass this information on to your colleagues in the most effective manner you know how, continuously reviewing the effectiveness of your methods and at the same time looking for new innovations.

Today the public is very aware of issues relating to health, and they have an interest in them. We must provide leadership in seeing that the information provided is sound and correct. This cannot be done by avoiding with a passion information media, such as the newspapers, radio, and television. We must be discreet in dealing with these media, but they must be dealt with. We cannot expect absolute control or total censorship, or for that matter even partial censorship, but we can expect responsible and accurate reporting if we provide the facts. Physicians must be educated to a realization that certain types of publicity are in the best interests of the profession and such publicity cannot and should not be so nameless and totally inanimate as to avoid any physician reference or expression of opinion.

Look to your State Association for assistance if problems develop in this or other areas, especially if you represent a small society where the personal equation may introduce difficulty. The same might apply in other matters of ethics or Society administration. Do not, however, expect the State Association to assume total parental responsibility. Remember you are of age, and you must accept your own challenges, wage your own battles, and assume your own legal responsibilities.

Lastly, I would like to refer to our obligation with respect to legislative issues and legislative influence. These matters as they relate to health are of prime concern to each of us. They are more important to us than to any other group, although many other groups have vested interests which are manifested in an abundance of ways. To date we have not been very effective in this legislative role either at the state or national level. But failure does not call for abandonment. We must at the County Society level involve ourselves with those who constitute our legislative representatives, being

cautious, however, not to find ourselves out of the ball park when the warm-up sessions are over and the real game is played. Again, in this area, dollars are vital. It is not enough to produce a few dollars to fight or support a given issue. If we are to be effective in legislative matters we must come to a realization that regular and continuing support is imperative not just in election years but every year, and not by just a few, but support virtually from all. It is our obligation to sell AMPAC and IMPACT and sell it constantly if we do not

wish to subordinate ourselves to those with vested interests who have learned to play the game far better than we to date.

I submit to you our responsibilities are real, and occasionally they assume frightening proportions. To someone has been credited the statement, "If you roll up your sleeves, you will seldom lose your shirt." I fear there are times we have lost our shirt for this or other reasons. It is time now to roll up our sleeves and enter the fight with new enthusiasm and renewed vigor.

## The Proper Role and Responsibility of the State Medical Society

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My purpose in the few minutes allowed to me this morning is an attempt to outline the role the Tennessee Medical Association occupies in the framework of organized medicine, from the standpoint of what it actually does, and then to evaluate how well it succeeds in attaining the role it might play if the philosophic requirement of a State Medical Society could be achieved. Obviously, the demands on a state society vary from state to state, and how well these demands are met vary also; but TMA while not identical with other societies might be considered to at least be typical, and I will refrain from pointing out wherein we differ and simply confine my discussion to the broader aspects of a state society's role, responsibility, and relationship as it is interpreted by our state association.

Membership in the Tennessee Medical Association is not compulsory for a physician properly licensed to practice in Tennessee, and membership in the County Medical Society does not automatically confer membership in TMA; but conversely active membership in TMA is not acquired without membership in the county society. The State Association is built with the county society as the basic unit in its structure. All of its policies, its activities, its motives and its methods are established and

approved by the county societies through representation in its House of Delegates.

The function of the State Medical Society is to supplement the needs and work of the county societies and to implement the policies, projects, and programs of the American Medical Association. In performing this function the Tennessee Medical Association is constantly busy, operating by means of an 11 member Board of Trustees, a 10 member Council, 26 standing and special committees, a dedicated and loyal staff, and all of this controlled by the House of Delegates, the actual policy making body of the Association.

The purposes of the Tennessee Medical Association are clearly outlined in Article II of the Constitution which I quote in its entirety:

### Purposes of the Association

The purposes of this Association shall be to federate and to bring into one compact organization, through the component societies, the medical profession of the State, and to unite with similar associations in other states to form the American Medical Association.

The aims of this association shall be:

(1) The extension of medical knowledge, the advancement of medical science, the maintenance of medical ethics, and the competence of the art of medical practice.

(2) The elevation of the standards of medical education.

\*President of the Tennessee Medical Association.

(3) The enforcement of just laws that have to do with the health and welfare of the people of this State.

(4) The promotion of friendly intercourse among physicians, and the guarding and fostering of their material interests.

(5) The enlightenment and direction of public opinion in regard to the problems of health and medical care, and the promotion of understanding between the public and the medical profession.

(6) To make the medical profession of the State more capable and honorable within itself and more useful to the public in the prevention and cure of disease and in prolonging and adding comfort to life.

This statement of purposes would seem to cover the subject very well but carrying them out is another matter, not because they are difficult to interpret but because they are so broad and inclusive in their application. For example, the extension of medical knowledge can mean postgraduate training programs as well as concern with undergraduate education. The Tennessee Medical Association is active in both fields. Through its annual meeting and its *Journal* it provides the profession with scientific essays and articles as a source of new information and review. Through its Liaison Committee with Medical Schools in Tennessee it demonstrates its interest and willingness to assist in undergraduate medical education, and through its membership in Health Careers in Tennessee and its program of lending money to needy and deserving students via the Student Education Fund it encourages the youth of Tennessee to medical careers.

As pertains to the advancement of medical ethics, the Council of Tennessee Medical Association is constantly alert and active in this endeavor. Using as its guide the Principles of Medical Ethics of the AMA and the Opinions and Reports of the Judicial Council of the American Medical Association, the Council investigates, advises, recommends, approves, and strives to promote and maintain a high standard of ethical conduct and behavior and medical competence within the profession in Tennessee.

The Constitution lists as one of the aims of the Association, "The enforcement of just laws that have to do with the health and welfare of the people of this State." In this arena of activity the Tennessee Medi-

cal Association finds itself more involved with each passing day, month, and year. The legislative activities of TMA are amazing both on a state and national level. Each succeeding General Assembly brings with it a whole host of proposed bills and regulations affecting Medicine and thereby the health and welfare of the people of Tennessee. TMA although always on the alert for bad bills and bad laws does not confine its activities to attempts to expose and defeat such bills, but has also sponsored and promoted and been largely responsible for many laws now among the Tennessee Statutes which have improved the health and welfare of our people.

Similarly, the Congress of the United States seems to have been curiously enamoured and enthralled with legislation of a medical nature during the past three decades. This reached its peak in the session of Congress just passed and the result as everyone knows was not what the medical profession would have liked for it to have been. Nevertheless TMA along with its sister state societies and through its county societies and individual physician members fought long and hard to prevent the destruction of the traditional sanctity of the patient-physician relationship, and having failed to prevent this entirely will continue to fight to preserve what is fundamental and basic to such a relationship by refusing to allow a third party to insert itself to the extent that the contact is broken and the mutual understanding and trust is nullified.

The Legislative and Public Policy Committee is one of the busiest of TMA committees. It must plan, anticipate, educate, interpret, demonstrate, and justify Medicine's reasons for opposing bad legislation and encouraging good legislation for the benefit of the public whose health and welfare are its first concern.

No professional association would be worth its salt if it did not pay some attention to the material interests of its members. The State Association watches over the rights and needs of its own. It operates a placement service for helping physicians who are seeking a place to practice to locate in an area which needs their services. The Committee on Insurance plans and ar-

ranges for the various types of insurance contracts which members of the association may require for their protection and security.

As previously stated the State Medical Society exists both for the benefit of its members and for the benefit of the public. To accomplish the latter goal its public service efforts are of extreme importance. Public service has been very cleverly and succinctly defined as doing good and getting credit for it. As this pertains to a county, state or national medical society this definition is insufficient. The public service that Medicine can and must render on a local, state or national scale extends beyond merely doing good. It extends actually into the realm of the principles of the Sermon On The Mount. Furthermore, the rendering by a medical society of public service is not a practice above and beyond the call of duty or even an adjunct or an appendix to the practice of medicine. The rendering of public service is a basic responsibility, obligation, and duty of the individual practitioner and the medical society on any level and this philosophy is a fundamental one.

You will notice that I have used the term public service rather than public relations. I much prefer the former. They are not necessarily synonymous but one I think supercedes, transcends, and includes the other. A good public service program on the part of a medical society just naturally results in good public relations, and conversely satisfactory public relations is not likely, perhaps not even possible, without an adequate public service program. The public's attitude toward the profession of medicine is directly proportional to Medicine's attitude toward the public. In spite of all that has been said in the past few years concerning the slipping of the physician's image in the esteem of the public, I am firmly convinced that as physicians we still occupy a high spot in the hearts and minds of society in general, all of which should bring us to a greater realization of our responsibility to it.

The positive public service programs and activities in which the Tennessee Medical Association is engaged are myriad and

varied. To mention only a few of them and to comment briefly on each would consume most of the available time that I have left, but to give some idea of what is involved I will just list a few of the major efforts:

(1) Full time liaison with news media, press, radio, television, throughout the state. Liaison with editors of daily newspapers.

(2) Sponsors legislative delegations to Washington annually to meet with Tennessee Representatives and Senators to discuss important state and national issues involving health and medical care. Works closely with the Legislative Council of the State of Tennessee for information and hearings on health issues.

(3) Maintains a close working relationship with state officials particularly in the State Department of Public Welfare on the development, promotion, and expansion of the Medical Assistance to the Aged Program.

(4) Sponsors a public relations breakfast at the annual meeting where approximately one hundred key community leaders are invited to a breakfast to hear the story of what Medicine is doing.

(5) Co-operates closely and works with the Tennessee Farm Bureau, and the U. T. Extension Service, and sponsors a state-wide Rural Health Conference.

(6) Sponsors and promotes a Mental Health Conference.

(7) Sponsors the Health Project Contest in high schools throughout the state of Tennessee.

(8) Correlates the activities of the Medicine and Religion Program in the state, a public relations activity bringing closer together physicians and clergymen.

(9) Supplies physicians and lay speakers on health and socio-economic subjects.

(10) Works actively through the responsible TMA committee on the problems of occupational health.

(11) Provides radio and television film clips on quackery and other health subjects distributed in co-operation with the American Medical Association.

These are just a few of the principal and positive programs in public relations in which the Tennessee Medical Association is involved. This is by no means all of the daily and routine matters dealt with, and it does not cover the multitude of questions and advice requested by various sources such as news media and others for information and services available as it relates to health and medical care.

As mentioned earlier much of the work of the Tennessee Medical Association is done

through its committee structure and my comments on the role of the state association would certainly be incomplete if I did not refer to the committees and their responsibilities. Again an accurate description of each committee activity is not possible in such a brief time, but a listing of them might be permissible and their names would serve to indicate the wide areas covered in this endeavor. In its efforts the Tennessee Medical Association utilizes the following committees in addition to those I have already mentioned:

- (1) Scientific Work and Post Graduate Education
- (2) Mental Health
- (3) Cancer
- (4) Blood Banks
- (5) Tuberculosis
- (6) Sight Conservation
- (7) Rural Health
- (8) Disaster Medical Care
- (9) Youth and Education
- (10) Inter-Professional Liaison
- (11) Medicine and Religion
- (12) Insurance
- (13) Hospitals
- (14) Health Insurance
- (15) Occupational Health
- (16) Consultative Committee on Prepaid Medical Care
- (17) Liaison Committee to the UMWA
- (18) Grievance
- (19) Liaison Committee to the Public Health Department
- (20) Advisory Committee to the Department of Public Welfare
- (21) Governmental Medical Services

Some of these committees are extremely active, others are standby committees called on only when the need arises. All are essential to the work of the Tennessee Medical Association.

One final comment about the role of the State Medical Society in political activity. About 30 years ago politics became interested in medicine and since that time medicine has necessarily become interested in politics. It has fallen to organized medicine to not only inform and educate its members in the intricacies of political practices and the basics of political issues but also to collect and apply hard dollars where they will do the most good in supporting candidates whose philosophies and attitudes most nearly conform with those of the profession as a whole, or at least a majority

of it. Because of the regulations which govern a professional society's activities this must be done separate and apart from the usual functions of the society and thus AMPAC (The American Medical Political Action Committee) on the national level was born. The component state organization is an integral and altogether essential part of this structure and in Tennessee IMPACT (Independent Medicine's Political Action Committee Tennessee) has been formed and charged to be the state association's arm through which the physicians of Tennessee direct their political activity and money. Membership in IMPACT is on a voluntary basis and consists of the payment of \$25 annual dues which entitles the contributor to membership in both IMPACT and AMPAC and the distribution of his dues in such a manner as to be effective on both a local and national level.

Participation of the physician in political activities is not a notion foreign to the fundamental and traditional concepts of medicine as a profession for the healing arts. It may be a new idea, but it is not out of place. Physicians have as much right and responsibility as anyone else to use their time, money, and influence in fighting to protect those principles of freedom and democratic government in which they believe. They are, perhaps, a somewhat more educated group than the average more obligated in this regard; they are certainly no less.

The role which a State Medical Society plays in the overall picture of organized medical activity is entirely dependent upon the interest and effort of its members. Those members who consider it only as another organization established to collect their dues, who know nothing of its function or structure, and who refer to it usually with a vague wave of the hand in the general direction of the Headquarters Office, are no asset in this role. The State Medical Society needs the interest, enthusiasm, and co-operation of its members more than it needs their money, and if it has all of these things including the money there is no limitation to the role it can play in carrying out the aims and purposes for which it is established.

# The Proper Role and Responsibility of the AMA

LEO E. BROWN,\* Chicago, Ill.

You will note that the title of this Symposium is somewhat restrictive. It also is somewhat presumptuous. It does not simply ask your speakers to define the role and responsibility of county, state and national medical groups, but expects you to confine your remarks to the *proper* role and responsibility.

Let me say at the outset that it is quite impossible for me to speak for the AMA on this subject for a number of reasons. First, because there are as many opinions as there are members in the AMA. If you could read the mail that is directed to the Executive Vice President's Office, you would realize there are thousands of interpretations as to the proper role and responsibility of the AMA. Some of these ideas are expressed in no uncertain terms.

Therefore, with your permission, I will confine my remarks to what I personally feel is the proper role and responsibility of the AMA based on 20 years experience as one of your employees.

If the American Medical Association were to be dissolved today, there would be another similar organization established tomorrow. Although there are a few who have suggested this approach to Medicine's present day problems, more and more physicians are looking to the AMA for leadership and guidance in these troubled times.

The proper role for the AMA to play is dramatized on many different stages to hundreds of scripts acted out by thousands of medical doctors with varying degrees of proficiency. This road-show plays in small towns and metropolitan centers, to audiences varying in size from one to two hundred million in the United States, and has reputation and influence worldwide.

Let us assume that the suggested roles that I think the AMA should play are proper roles, otherwise I would not feel they were worth mentioning. I think it is also

important to clarify one other point:—It would be absolutely impossible to discuss the legion of roles played by the AMA and therefore those I do mention will be confined to major roles in contrast to bit-parts.

The AMA is a federation of 54 state and territorial medical associations, with a membership of 210,000 medical doctors out of a total physician population of 294,000. Its policy making body is the House of Delegates, elected on a representative basis by each state association. The House of Delegates elects the officers, Board of Trustees, and the membership of four standing committees—the Council on Medical Service, the Council on Medical Education, the Judicial Council, and the Council on Constitution and Bylaws.

The Board of Trustees is responsible for the operation of the AMA between meetings of the House. To assist in discharging this responsibility, the Board has established 10 councils, 16 committees, and numerous commissions and liaison committees.

It would take all day to comment on the proper role and responsibility of each of these councils, committees, and commissions. For example, let's take one which has commanded the interest of every AMA member in recent years—the Council on Legislative Activities.

What is the proper role and responsibility of the Council on Legislative Activities—the Council outlines its role and responsibilities as follows:

## Role

- (1.) To review proposed federal legislation and recommend to the Board appropriate AMA action within existing policy.
- (2.) To recommend changes in existing AMA policy when and where necessary to accomplish effective legislative goals.
- (3.) To serve as a reference council through which all legislative issues of the Association are channeled prior to final consideration by the Board of Trustees.
- (4.) To maintain constant surveillance over

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American Medical Association

the legislative scene including the anticipation of future legislative needs.

### Responsibilities

(1.) To meet with other councils to seek solutions to legislative problems of common interest.

(2.) To refer issues under consideration to other committees and councils for advice and recommendation when said issues properly fall within in their sphere of activities.

(3.) To keep apprised of all state legislation which may bear on existing or proposed federal legislation.

(4.) To review resolutions introduced at annual and clinical sessions, and appropriately assist reference committees.

(5.) To appear before Congressional committees to present statements on behalf of the Association if requested by the Board of Trustees.

(6.) To undertake speaking engagements on behalf of the AMA in areas of special legislative knowledge in conjunction with the Speakers' Bureau of the AMA.

(7.) To participate in any mechanism established within the structure of the AMA for special legislative purposes.

(8.) Finally, it is the legislative responsibility of the Council to develop avenues of communication outside the Association.

Rather than subject you to a report on the proper role and responsibility of each of the AMA's councils, committees, and commissions, I want to highlight the proper role and responsibilities of the AMA in broad generalities.

The AMA is many things to many people. It is a unifier, providing a forum for thought and action of the medical profession. It provides a singleness of purpose for the entire profession. It is an organizational vehicle wherein the individual physician can join with his colleagues, working together, to accomplish chosen objectives.

The AMA is a policy maker, acting on behalf of, and at the direction of its constituents, the Association establishes the policies which govern the actions and direction of the medical profession. AMA policy may start with a single physician member who takes his suggestion, plan or program, to his county medical society for endorsement. The county society in turn requests the state medical association to react. If favorably acted upon the state society level, it may be presented to the AMA House of Delegates. If the statement, plan or program is adopted by the AMA House of Delegates,

it becomes the policy of the Association. If the individual physician does not wish to use this route, he may encourage a state society delegate to introduce his proposal directly to the AMA House for action.

The AMA is a spokesman, speaking in behalf of the medical profession it enunciates its policies and positions to the public, profession, and government. The AMA speaks out in many ways—through its publications, its elected officials, its testimony before Congress, etc.

The AMA is a planner. One of its proper roles is to plan a course of action for today and the future as to ways and means of improving the quality of medical services rendered to the people; of insuring an adequate supply of physicians and allied health personnel; of creating and promoting sound financial mechanisms for financing the cost of medical services.

The AMA is an initiator and implementor. Not only must a national association be a planner, but it must initiate and implement programs designed to improve and to keep pace with scientific, social and economic advances. This is a major function of the AMA as evidenced by the multitude of programs now sponsored by county and state medical societies which had their origin at the national level.

In this regard, the AMA also becomes a stimulator. It originates, supports, encourages and promotes the implementation of programs and policies designed to advance the practice of medicine.

The AMA is an educator, of its members and of the public. There is little doubt but that one of the proper roles the AMA must play is in the field of medical education. As a matter of fact, it was the primary reason for organizing a national association of medical doctors back in 1847. Since that time, the AMA Council on Medical Education has played a leading role in establishing America as the medical education Mecca of the world. AMA accreditation of medical colleges, internship and residency training programs, and postgraduate programs has kept medical education standards high and, being recognized by governmental agencies, these standards have been en-

forced. The Council also has played a significant role in curriculum planning to meet scientific advances and changing practices of administering medical services.

The AMA role as educator is further exemplified through the weekly *Journal of the American Medical Association* and 10 monthly specialty journals, its annual and clinical scientific seminars, its publications *New Drugs and Current Medical Terminology*, as well as scores of meetings and programs designed to advance the practice of medicine.

The AMA's role of an educator also encompasses the general public. Its consumer publication, *Today's Health*, with a circulation of approximately 900,000 monthly, carries timely health education material into the home, school and office. Fifty-five years of continuous cooperation with the National Education Association has won acclaim for the Association in many quarters of our society. The distribution of millions of health education pamphlets each year on a variety of subjects places the American Medical Association among the leaders in this field.

The AMA is also a protector, conducting an active aggressive program to protect the consumers of medical services. As one of four national associations sponsoring the Joint Commission on the Accreditation of Hospitals, the AMA has played an influential role in maintaining high standards of care in our Nation's hospitals. Similarly, its promotion of medical audit committees, tissue committees, utilization committees and grievance committees has

played a prominent role in protecting the consumers of medical and hospital services.

The AMA is a representative, representing the medical profession in the Halls of Congress and to the administration, joined with allied health and medical associations, hospitals, pharmacy, nursing, the bar, veterans organizations, and practically every segment of American life.

The AMA is a defender of the private practice of medicine. It defends the right of state medical associations to retain local autonomy. It defends the public against the unscrupulous and incompetent physician and medical quack.

The AMA is the plaintiff who pleads the cause of the public in health and medical matters. It is an arbitrator of disputes within the medical profession.

The AMA is the conscience of medicine through the establishment of ethical standards to which all physicians must adhere. And, last but by no means least, the AMA is a Leader. It is in the forefront of all worthy causes which will improve the health and medical care of the people.

Perhaps you are wondering—Can the AMA be all things to all people? No, but it can try, and this is the challenge we all face at the county society level, the state association and the national.

In one sentence—The proper role and responsibility of the American Medical Association is to give daily testimony of its stewardship of the medical profession in behalf of the public.

## STIMULATING GREATER PARTICIPATION IN MEDICAL SOCIETIES

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Medical societies have made significant progress during the past 20 years. It was 200 years ago this year, in 1766, that the first state society was organized in New Jersey. Yet, without question, the most noteworthy gains have been recorded since World War II.

In evaluating the status of medical socie-

ties, the current appraisal can be summarized with one very definite statement. Medical societies in this nation are stronger today and more effective than ever before.

This is true by any method of comparison, or by any yardstick of measurement. This nation now has a network of more than 2,000 county, state, national, and specialty societies. These associations are dedicated to enhancing the finest system of med-

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ical care in the world today, to encouraging individual initiative and integrity in medical practice, to sustaining the physician's contribution to society, and most importantly, to providing the best medical care possible for the people whom they serve.

By another standard of measurement, medical societies in this nation rank as the leaders throughout the world. Many societies in other countries are fragmented, their members are divided, and most of their organizations are weak and ineffective. Many of them have defaulted leadership in medicine to their governments.

By any yardstick, medical societies in this nation have come a long way during the past two decades. Many societies are more active and more productive now than at any time in history. Accomplishments have been substantial.

Yet, many qualified observers admit concern about the present and about the future. There is reason to be concerned about continuing federal encroachment into the private practice of medicine and the impact of government controls. There is concern about those societies which have defaulted leadership to hospitals, to voluntary health agencies, and to government. There is concern about the splintering of the profession, the division of one group against another, and the adverse effect upon medical societies. Medical officers and executives are concerned about the problem of finding adequate financing for societies. They also are concerned about procuring more staff manpower and resources to fulfill increasing work responsibilities. There is real concern about the great number of physicians who take no interest, and who make no contribution at all. This paper recognizes this lethargy, and is designed to stimulate greater participation in medical societies.

#### **Stimulating Participation**

Stimulating participation in medical society affairs is a most difficult challenge. There are no panaceas or quick remedies. Nevertheless, there are sound principles and positive ideas which can be used effectively by medical society officers and executives.

Stimulating participation starts at the top

with the society's officers. It is their responsibility to create real enthusiasm for the Society and its projects, first among committee members, and then to broaden the circle among the membership as widely as possible.

The keys to greater participation involve imagination, planning, organization, implementation, involvement of the membership, and a great deal of effort by key leaders. Membership participation will come more quickly to those society officers who develop activities which are both exciting and realistic—to those who present a broad-based program which is important and meaningful to physicians. The value of a professional society can be measured only in terms of services rendered to its members and to the public. Physicians always will look for a direct return on their dues investment. Once the Society has demonstrated its ability to be of service in time and need and to resolve problems efficiently and effectively, the membership can be expected to reciprocate by participating. Most physicians will respond if asked to render a service and if provided with a good reason for doing it.

Yet, stimulating participation is really not that easy. The problem of getting a large percentage of members "into the act" always will be a major challenge. Just as a plant's growth responds to various stimuli, so do individual doctors respond to various technics which can be employed to arouse interest.

The secret of success lies in the selection of the proper stimulant to incite interest and the providing of carefully planned aids to assist the physician in achieving a specific objective. To select the proper stimulant, it is necessary to know as much as possible about the individual's professional practice, his community and social interests, his church and party affiliations, and his hobbies. With that information on hand, the task then is to match the assignment with the doctor's interests and his abilities. Simply stated, the first cardinal principle is the careful matching of the physician's interest, his knowledge of the job to be done, and the abilities and the contacts he possesses to accomplish the objective.

### Orienting the New Physician

The process of stimulating interest in medical society affairs should be initiated even before the new physician reaches his community. One of the most significant developments which has helped to build medical organizations is the presentation of special programs for medical students. Many county and state societies are sponsoring Medical Student Day programs for the senior classes at schools within their jurisdictions. These programs are designed to provide the student with an insight into the purposes of medical societies and their activities as well as to furnish him with practical information which will make his introduction to medical practice a little easier and smoother. This is a sound approach in building for the future.

County society officers have their greatest opportunity to stimulate participation by courting the new physician just as soon as he reaches his community. It has been said that a first impression is a lasting one, and so it is with medical society participation. New physicians should be greeted personally by the President and the Secretary. There is merit, too, in following up with a letter of welcome, along with appropriate information and brochures about the Society. Each new physician should be interviewed personally, if possible, and information should be secured about his interests and his needs. In this way, the new member will learn that the Society does care about him. Some societies effectively employ a so-called "buddy" system. They ask physicians who sign application endorsements to look out for the new member and to bring him to meetings. This will insure the new member's appearance as well as that of his endorser.

No matter how small or large the medical society, a comprehensive orientation program for new members is a "must." Many societies now present a series of indoctrination lectures on facets of medical practice, with emphasis on ethics, etiquette, and local customs. In some societies, the physician must complete the series before his application can be acted upon. In other societies, the new member is obliged to fulfill the requirement within the first 12 or 24 months.

The orientation program has proven to be an effective technic in developing a more active society and a better informed membership. It is a contributing factor to increasing the utilization of Society services. It will make those who attend more cognizant of their responsibilities, both to the profession and to the public. Finally, the orientation provision of required attendance can help establish habit patterns which will lead to greater participation.

### The Use of Communications

This discussion about stimulating participation would be somewhat hollow without the effective use of communications. Once a program is developed, it obviously must be presented to the membership in an imaginative manner. The same principle applies to problems, regardless of whether they are intramural in nature, whether they relate to hospitals, to town and gown, to the community, or to government. Physicians will not become interested if they are not made aware of the problems, the projects, and the working mechanisms of the Society. The use of the various media of communication, therefore, is basic to stimulating more interest. If problems and projects can be communicated adequately, they should result in greater understanding and in membership interest.

Maintaining good communications is a continuous, day-to-day, year-around assignment. The membership must be kept informed regularly so it feels that it is part of the team. This will require the use of every medium of communication available—the journal or bulletin, the newsletter, announcements at meetings, hospital bulletin boards, and direct mail.

Most importantly, officers and executives should not overlook the most effective medium of all—personal communications. It is amazing, yet it is true, that some physicians never seem to get the message. Journal articles, letters, bulletin notices, promotional mailings, and even telephone calls frequently go unnoticed. This is where personal contact hits the mark.

Active participation generally can be stimulated only by personal contact between Society leaders and those whose interest they are seeking. To cite just one

example, in some societies, the project chairman will invite a selected number into his home for cocktails. He takes that opportunity to outline the project, its objectives, and the plan of action. Many societies feel that this is one of the finest technics of all to command the physician's attention, to arouse his interest, to let him know that he is personally wanted, and to secure his participation.

#### **Committees—The Life Blood of the Society**

The organizational key to stimulating participation is the development of a sound committee structure. Committees, in many ways, are the life blood of the Society. The Society's achievements and its prestige generally will rise or fall with these groups. By themselves, society officers can produce relatively little. However, when their energies and talents are swelled a hundred-fold through committee appointments, the expanded organization can move mountains.

Committees obviously represent the most useful technic for achieving a broad base of membership involvement. At the same time, the committee appointment can provide the individual physician with the greatest satisfaction of his membership, and his best opportunity for service to the profession. His degree of satisfaction will be directly proportional to that which he puts into it.

Perhaps the greatest contribution that any President can make is to continually seek out new "blood" for society committees and responsibilities. One of the best ways to gain the participation of the new member is to appoint him to a committee. At the same time, officers should encourage long-standing members who have not been active to become involved and to make a contribution to the Society. Nothing will kill participation more completely than when the membership feels that the same old gang is running the show.

Some societies routinely put every new member on a committee. Others circulate a roster of committees with their functions to all members every year or two, and invite physicians to express their preference. This makes it easy for members to offer their

services, and it provides the Society with a team of volunteers to do the work.

In metropolitan societies with large memberships, it obviously is not possible to appoint each physician to a committee. Nevertheless, imaginative officers and executives are finding outlets for all new members and for those who are willing to work. Some societies appoint many new members to the Speakers Bureau. It also is possible to appoint newly-elected members to special community projects, such as Sabin on Sunday immunization programs, to man exhibits at health fairs, and to serve as judges for science fairs in the local schools.

Perhaps one word of caution should be sounded on committee appointments. There is a tendency to overload an energetic, capable physician with a multitude of responsibilities. Rather than the use of the same old workhorse, it is far better to limit every physician to one appointment, and to spread the assignments among a greater number of members.

The principle of stimulating participation does not end with the mere appointment of committees. Nothing is more frustrating to a physician than to be named to a committee that never meets, or to one that has nothing to do. Similarly, half-hearted, cursory approaches to a problem will quickly destroy committee effort and physician participation. It is vitally important to outline specifically the committee's duties as well as its aims and goals. At the same time, the committee should be given considerable latitude to develop its own ideas. Officers also have a responsibility to provide the committee with administrative assistance and other resources which might be necessary. Committees should be given an opportunity to report regularly on their progress, problems which they have encountered, and their accomplishments. In addition, the contributions of each individual physician and the committee should be recognized. Rather than to merely express appreciation, it is better to cite or to commend the physician for a job well done. Like every one else, physicians are pleased to be recognized by their professional society, and they will likely be willing volunteers for future assignments.

### Improving Attendance at Society Meetings

In any discussion related to the stimulation of participation, attention should be given to the problem of attendance at regular meetings of medical societies. No one needs to be convinced of the need for improving participation in meetings. Only a relatively few societies can boast of attendance which enable them to perform at peak efficiency and to fulfill their obligations to the profession.

There is a correlation between the numerical membership of the society and the percentage of attendance at meetings. As a general principle, the larger the membership of the society, the smaller the percentage of attendance. Surveys have revealed that the larger societies also have a higher percentage of "deadwood"—that is, those members who never attend a meeting, and who contribute very little or nothing, except for the payment of dues.

Valuable information has become available through a survey designed to secure information on the factors which contribute a good attendance. County societies in Texas which reported better-than-average attendance were surveyed. In addition, ideas and suggestions have been provided by 25 medical executives throughout the nation who are regarded as highly knowledgeable.

Here again, it is evident that there is no magic formula which will guarantee good attendance for every society. Nevertheless, those who have been successful have postulated that there are several primary factors which merit attention:

The most important element, of course, is the presentation of outstanding program and the conduct of timely, meaningful, yet uncomplicated business meetings. Simply stated, physicians will attend if there is sufficient interest in the meeting; otherwise, they will stay home or find something better to do.

It is not the purpose of this paper to elaborate on programming. Nevertheless, one very brief observation might be offered. Many who are knowledgeable agree that there is nothing like the "pocketbook" issues for stimulating attendance at meetings. Even as remote as the society's immuniza-

tion program in the community may seem, it very well could have a direct bearing upon the fees charged by the physician in his practice. Most physicians are vitally interested and they would like to have some voice as to how those issues are resolved. At this time, most physicians are vitally interested in procuring information on the new Medicare program, particularly the impact which it will have upon their practice, medical service, and hospital care.

Presidents should make certain that there is always one so-called headline item on the agenda for every business session. Rambling and lengthy reports should be eliminated, preferably by requiring those who are to present them to prepare them in writing. There should be emphasis upon encouraging, even soliciting discussion from the floor. Officers should endeavor to stage meetings for those members who attend.

A second factor in good attendance is food and fellowship. As one county society secretary pointed out: "We have a cocktail hour and a steak at the best restaurant in town. Attendance automatically takes care of itself." A medical society executive put it even more bluntly when he wrote: "The fellowship hour is the blood and guts of stimulating attendance."

Concurrent or joint meetings of the medical society and the Woman's Auxiliary are highly recommended. More and more societies are including the wives in as many meetings as is practical. There is no doubt that joint or concurrent meetings can be a factor in stimulating attendance by both the physician and his wife. This same general principle also applies to joint meetings with lawyers, the clergy, and other professional groups.

Emphasis also should be placed upon advance notification of the meeting, with particular citation on important policy matters which are to be discussed. An effective plan employed by many societies is an initial notice 10 to 14 days in advance of the meeting, with a followup reminder just prior to the program.

A fifth factor is the scheduling of the meeting at a central location which will permit a majority of members to attend

without hardship.

The importance of developing good relationships between physicians is another vitally important factor. When each doctor strives to promote better professional relations, the society is bound to profit. Many societies are blessed with a feeling of friendship and group interdependence. When the general attitude is wholesome, that in itself will stimulate attendance as well as participation in society affairs.

The seventh factor in building good attendance is personal initiative displayed by officers of a society. As in all phases of stimulating participation, responsibility rests with the society's key officers. A society cannot hope for good attendance without the imagination and the devoted attention of officers in arranging and conducting outstanding meetings.

#### **The Medical Society of Tomorrow**

With these thoughts and ideas for stimulating greater participation, attention can be given to what the future may hold for medical societies. One projection and forecast seems justified. Tomorrow's medical societies will cast a longer shadow than they do today. The individual strength, the scope, and the prestige of societies will be considerably greater than they are at present.

Medical societies can be expected to grow in response to bigness in government, in hospitals, and in unions. Bigness will be generated by acquisitions in business activities and in services, through consolidation of resources in defense against intrusions by government, in response to greater needs by members, and in response to more demands by the public upon members.

Physicians will take a greater interest and they will become more involved in their medical societies. This will be necessary for professional freedom and independence will be related directly to the survival of the medical society. Medical organizations can be expected to broaden their horizons and to represent all of their members to a greater extent. This should lessen one of the most devastating wedges which was witnessed in the 1950's—the splintering of the profession. Medicine is

starting to receive tangible evidence of greater cooperation between physicians in the various fields of practice and their medical societies which represent them. The specialty societies, particularly, are beginning to work more closely with county, state, and national organizations. At this time, medical leaders have a great opportunity to help reunite the entire profession. If medical societies are to survive, they obviously must represent all of the various interest groups, and they must provide useful services to each member.

Medical societies also will undergo great structural and functional change during the decade ahead. Many activities and projects will become unnecessary, outdated, and duplicated either by government or by other organizations. It will take wisdom to formulate medical society planning, and it will require courage to abolish activities which no longer are vital. As at present, set programs will continue to have their loyal followers. Nevertheless, objectivity will mark the successful organization. The progressive society will be the one that will allocate its resources intelligently.

From a financial standpoint, while there is realistic concern about the immediate short-term outlook, the medical society of 1975 will be considerably stronger. The development of larger societies will bring about a consolidation of resources. Funds for good solid programs are not likely to be a critical problem. Many programs and services will be self-sustaining. They will be financed apart from dues expenditures. It can be anticipated that physicians who use these services will be willing to pay for them.

Taxation undoubtedly will play a part in the changing structure of medical societies. By 1975, many societies likely will be operating in part as profit-making organizations, and paying income taxes on portions of their revenues. More and more, it is likely that medical societies will incorporate their business functions as profit-making operations.

But the most compelling force of all for change will be imposed by the federal government. As physicians know painfully well, the centralized government today is

larger, more powerful, and more forceful than ever before. Tomorrow, it will be still larger and more awesome. To cope successfully with government, physicians will be compelled to rely more and more upon their medical societies. Medical societies will respond by establishing Departments of Government Relations, or at least by appointing knowledgeable individuals to coordinate liaison with the various agencies.

With the growth of government, another serious problem for medical societies likely will loom within the next 10 years. The government can be expected to provide more services for physicians, and many of them will duplicate activities of medical societies. The government may compete di-

rectly by publishing medical journals, by offering scientific programs and postgraduate courses, by providing library services to doctors in practice, and by engaging actively in the field of physician placement.

Finally, it can be anticipated that medical society officers and staff will be accorded even more responsibility than they have today. As the time of practicing physicians becomes more precious, they will rely more upon their officers to represent them and to protect their interests. But to represent the profession effectively, and to mount challenging responsibilities, medical societies will need the active support and participation of a greater number of physicians.

#### Rheumatic Fever in the Adult, Adatto, I. J.; Poske, R. M.; Pouget, J. M.; Pilz, C. G.; and Montgomery, M. M., J.A.M.A., 194: 1043, 1965.

The authors report their observations on 35 adults with the diagnosis of acute rheumatic fever seen between 1954 and 1964 at the Chicago V.A. West Side Hospital. As expected from the population using this Hospital, all but one of the patients were male, ranging in age from 23 to 68 years. The diagnosis was made on the basis of the Modified Jones Criteria, but serologic proof of preceding B-hemolytic streptococcal infection was also required for inclusion.

Seventeen of the 35 patients gave histories of one or more previous episodes of rheumatic fever. Eight of these had evidence of pre-existing rheumatic heart disease. Of the 18 patients without a history of previous rheumatic fever, 2 had evidence of pre-existing rheumatic heart disease on admission.

None of the patients had chorea, subcutaneous nodules, or erythema marginatum. Thirty-four of the 35 had migratory polyarthritis, predominantly involving the large joints. The clinical response of the joint manifestations to salicylates was excellent. No residual joint symptoms or deformities occurred.

Eight patients had clinically apparent carditis during their acute attacks. This was manifested

by pericarditis in 4 and by the development of new significant murmurs in 4. Two patients died during their acute attacks. One of these, a 64 year old man, developed acute rheumatic fever with carditis, with neither history nor clinical evidence of preceding rheumatic fever. Postmortem examination confirmed an acute rheumatic carditis without evidence of chronic valvular involvement.

Twelve patients who did not have clinical evidence of carditis during their studied episode of acute rheumatic fever were followed for periods of 6 months to 7 years. Of the 9 who had no evidence of rheumatic heart disease when first seen, 3 were found to have developed evidence of rheumatic heart disease. Three patients with evidence of rheumatic heart disease when first seen had evidence of new valve involvement.

The authors conclude that their findings speak for the need to continue penicillin prophylaxis in the adult, particularly in patients who have had recent episodes of rheumatic fever and in those who have rheumatic heart disease without a history of acute rheumatic fever. (Abstracted for the Middle Tennessee Heart Association by Robert I. Lehrer, M.D., Director, Heart Disease Control Program, Tennessee Department of Public Health, Nashville.)

The effects of drugs and electrolytes on the EKG are not unusually mistaken by the novice for intrinsic myocardial damage. The authors analyze these effects in a way which should be helpful.

# The Influence of Drugs and Electrolytes on the Clinical Electrocardiogram

LEO G. HORAN, M.D., and NANCY C. FLOWERS, M.D.,\* Memphis, Tenn.

There are distinct morphologic changes in the electrocardiogram characteristic of certain acute alterations in serum electrolytes. It is well for the clinician to be cognizant of the hints currently available as to how these changes may be produced. It is of even greater clinical importance for the physician to be aware of the limitations upon interpretation of these changes, especially with regard to the masking or imitative effects of digitalis, quinidine and other cardio-active drugs.

Knowledge of relative concentrations of potassium and sodium inside and outside the cell may make it theoretically possible to compute the resting membrane potential in living myocardial cells from Nernst's equation for the potential at the junction between two different electrolyte solutions.<sup>1, 6</sup> Also because the electrical activation of the cellular membrane may result from the flow of ions across the membrane barrier, it is feasible to predict qualitative changes in the configuration of single membrane potentials and their composite effect on the electrocardiogram.

Precise information is not yet available regarding the exact rate of exchange of ions. We have therefore taken the liberty of simplifying the sequence of events in ionic shift to facilitate a grasp of clinical applicability. In simplified form the effect of acute alteration in the inside-outside gradients for the major cations is seen in figure 1. In the upper panel on the far left a representative segment of membrane is illustrated showing that the major inside ion is potassium and the major outside ion is sodium, and that the charge on the membrane has its positive sense outwardly directed. Turning to a commonly accepted derivation of the electrocardiogram based upon a rep-

resentative block of left ventricular free wall (middle and right sections) we can see that the rapidly moving wave of depolarization moving from endocardium to epicardium generates a largely upright QRS complex in an epicardial or lateral chest lead. This is the time of rapid inflow of sodium followed soon by the outflow of potassium. The repolarization process is slower but, in the normal myocardium, occurs predominantly in the subepicardium earlier than in the subendocardium. This is the time characterized initially by cellular outflow of potassium and terminated by slow restitutive outflow of sodium and inflow of potassium.

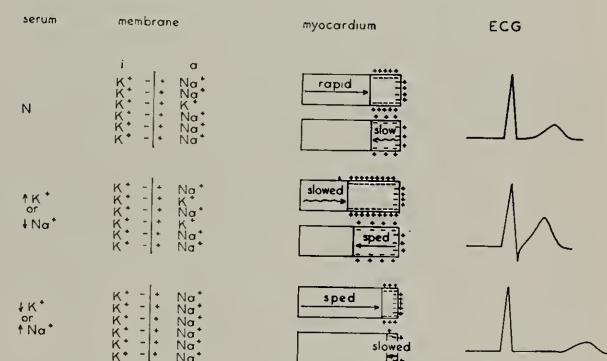


FIG. 1. Three panels illustrating diagrammatically the effect on the cellular membrane, the processes of depolarization and repolarization and the electrocardiogram for normal electrolyte balance (upper panel), hyperkalemia (middle panel), and hypokalemia (lower panel). See text for details.

In the middle panel of figure 1 is illustrated the condition of hyperkalemia (of relative hyponatremia). Note now that the sodium envelope surrounding the cells has been slightly modified by the inclusion of a greater number of potassium ions so that the gradients of concentration of sodium outside to sodium inside and potassium inside to potassium outside have both been diminished. Thus, if the process of depolarization is occasioned by flow of sodium down its gradient and sustained by the flow of potassium down its gradient, it will now be

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less precipitous because of the gentler slopes. As a result the process of depolarization is slowed and the corresponding QRS complex is widened. On the other hand, the relatively greater concentration of potassium outside and sodium inside should favor the replacement of ions on their respective sides of the membrane with resultant speeding of repolarization and shortening of the QT interval.

The lower panel in figure 1 illustrates the contrasting state of hypokalemia (or relative hypernatremia). In this instance there is less frequent opportunity for an occasional extracellular potassium ion to shoulder its way up to the membrane border. The concentration gradients are greatly enhanced:—there is relatively more sodium in the extra-cellular envelope of ions waiting to get in and less potassium outside to impede the outflow of that ion from the cell. Thus, as compared with the normal, depolarization is speeded and the QRS interval may be expected to be shortened in duration and possibly heightened in amplitude. (This is rarely observed in the clinical electrocardiogram although the counterpart of atrial depolarization frequently is accompanied by shortening and peaking of the P wave.) We may further expect repolarization to be slowed with consequent widening of the QT interval because both cations have to be replaced across the membrane against relatively steep gradients.

These considerations as to the effect of the relative concentrations of the cations on each side of the cell membranes predict in great part the classical clinical patterns of potassium-sodium imbalance. The pattern in hyperkalemia is that of a wide QRS complex (usually with a new S wave in the lateral precordial leads), a narrow QT interval, and peaking of the T wave.<sup>5</sup> As shown in figure 2, progressive widening and increasing prominence of the S with further emphasis on the T, leads ultimately to a diphasic oscillation or sine wave. Enroute to this pattern the slowed depolarization process may yield an electrocardiographic pattern imitative of right or left bundle branch block or an abnormal Q wave may appear—erroneously suggesting myocardial infarction. Concomitant with these mor-

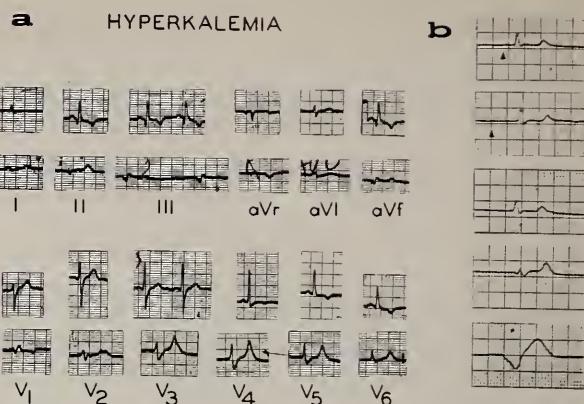


FIG. 2. (a) The empirical electrocardiographic pattern of hyperkalemia. Note peaked T waves. (b) A series of electrocardiograms illustrating increasing degrees of hyperkalemia. Note increasing P-R interval, then disappearance of P waves, and finally widening of QRS complex and peaking of the T wave together progressing to the "sine wave" configuration.

phologic alterations in the ventricular complex, atrioventricular block may appear and tend to become sustained with the increasing severity of the hyperkalemia. Disappearance of the P wave may occur in any of three different ways: (1) periodic sinus arrest, (2) progressive lengthening of the PR interval until the P becomes "lost" in the preceding T wave, (3) progressive diminution in amplitude of the P wave until it becomes undetectable. Soon after the development of the sine wave pattern cardiac standstill or ventricular fibrillation frequently occurs.

If one considers the U wave a part of the repolarization process, the predicted lengthening of the ventricular interval, whether QT or QU, is confirmed clinically.<sup>1</sup> Figure 3 illustrates the progressive alteration of ST-T and U with increasing degrees of hypokalemia.<sup>6, 7</sup>

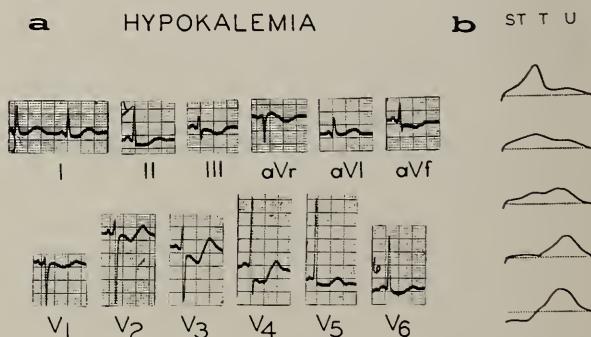


FIG. 3. (a) The empirical electrocardiographic pattern of hypokalemia. (b) A series of electrocardiograms illustrating progressive sagging of the ST segment, lowering of T wave and accentuation of the U waves with increasing degrees of hypokalemia. (After Lepeschkin and Surawicz).

The reliability of the electrocardiogram as an index of sodium-potassium imbalance is limited. First, it is important to realize that the effective cause of electrocardiographic changes is an imbalance in the serum sodium/potassium ratio. Since this is normally about 35 to 1, it follows that small changes in potassium concentration produce greater effect than equal absolute changes in sodium concentration. If both ions are simultaneously deviated to a higher or lower concentration a normal electrocardiogram may result. The appearance of diagnostic findings depends upon the gradients which develop in the presence of fairly normal concentrations of electrolyte within the myocardial cell. Therefore the electrocardiographic findings of electrolyte abnormality are more applicable in acutely changing states such as diabetic acidosis, short-term vomiting, and acute renal failure. Chronic alterations which have given the internal concentrations within the cell time to readjust (as in chronic congestive heart failure with sustained diuretic therapy) can lead to errors in interpretation. In such instances the internal concentrations of sodium and potassium upon which the diagnostic electrocardiographic membrane effect is based have departed from the reliable range. Further obscuring of the electrocardiographic picture may result from mixed electrolyte imbalances or from the masking effect of certain drugs. And, finally, in all too many cases the changes in ST, T, and U are not characteristic in configuration and therefore are nondiagnostic.

Significant alteration in concentrations of the calcium ion may produce distinctive abnormalities in the electrocardiogram. The effect of elevated concentrations of calcium is imitative of the effects of digitalis including the mild effect of QT shortening as well as the toxic manifestations. Indeed the effect of digitalis on the myocardial cell may be mediated by the internal link of the calcium ion between the membrane and the metabolic and contractile elements in the interior. On the other hand, hypocalcemia leads to a lengthening and flattening of the ST segment. This is accompanied by an increase in the duration of mechanical systole and an increased distance between the first

and second heart sounds. The intravenous administration of calcium will usually result in shortening of this interval. There are occasional nonspecific inversions of the T wave.

The drug of most common electrocardiographic interest is digitalis. Its actions on cardiac muscle may be summarized as follows: (1) It produces slowing of depolarization as to its onset in the sino-atrial node and its passage through the atrioventricular node (both by its vagal action and in large doses, its direct action on the myocardium). There is, however, no slowing of spread of depolarization in ventricular muscles.<sup>2</sup> Digitalis does, however, speed the onset and spread of repolarization. This probably relates to the increase in automaticity resulting from digitalis administration. Figure 4 illustrates the common electrocardiographic findings which result from digitalis administration. Note that the shortening of the QT interval, characteristic development of a minus-plus T wave first with flattening of the ST segment and later sloping of the ST segment with a ramp-like descent into the T wave are the only manifestations of "digitalis effect." All the other manifestations are those of toxicity. Further deformation of the ST-T results in slurring of the junction so that the ST and T take on a U shaped or concave (from above) appearance. This is the only other change related to the ventricular complex. The remaining toxic manifestations relate either to the development of increased automaticity (ventricular premature beats, bigeminy, tachycardia, and fibrillation, and A-V nodal or ventricular rhythms slower than the usual

#### DIGITALIS: ECG MANIFESTATIONS

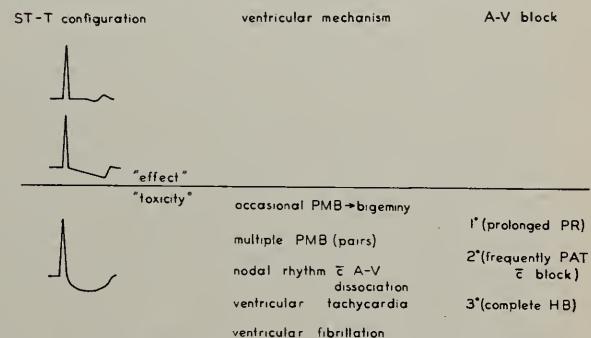


FIG. 4. Diagrammatic summary of the electrocardiographic manifestations of digitalis effect and digitalis toxicity.

tachycardia but faster than the idionodal or idioventricular inherent rhythms) or atrioventricular block.

Further aspects of the use of digitalis of electrocardiographic interest require comments. First, all the signs of digitalis intoxication can be produced by sensitization of the myocardium by potassium deficiency (with or without measurable hypokalemia) in the absence of a true total bodily excess of digitalis.<sup>8</sup> An important guide to digitalization even in the absence of atrial fibrillation is the electrocardiographic search for beginning signs of increased A-V nodal conduction time. It is important also for the clinician to make a distinction between ventricular premature beats which may be an early sign of digitalis intoxication and aberrantly conducted supraventricular beats (Ashman beats) which occur with greater frequency in untreated or under-treated atrial fibrillation.

The electrophysiologic effects of quinidine and procaine amide are (1) slowing of repolarization and (2) slowing of depolarization.<sup>9</sup> Delay in repolarization results in sagging of the ST, lengthening of the QT, and increased prominence of the U wave (i.e., in this respect quinidine produces an excellent imitation of the electrocardiogram of hypokalemia). It is of clinical interest to note that the lengthening of the QT interval with quinidine administration may also be accompanied by lengthening of the refractory period and, unfortunately, sometimes widening of the vulnerable period. Delay in the depolarization of the ventricles and slowing of conduction through the Purkinje system results in widening of the QRS complex, a distinguishing feature in the differential diagnosis between quinidine effect and hypokalemia. Prediction as to the effect of quinidine on the A-V node and subsequently the PR interval is unreliable. The effect on the A-V node of quinidine may result in lengthening or shortening of the PR interval or no effect. This paradox arises apparently because there is no guide as to whether the greater poisoning effect of quinidine will be directly on the node or upon the vagal fibers suppressing the node. It is for this reason that the clinician must always consider in advance that administra-

tion of quinidine may either impair or enhance AV transit time. For instance, in atrial flutter there may be an increase in the degree of AV block with desirable slowing of the ventricular rate or a decrease in the degree of block leading to "1-to-1" conduction with its attendant hazards.

The electrocardiographic effects of the common drugs and electrolytes are summarized in figure 5 in terms of the primary effects on the duration of depolarization, the duration of repolarization, and the tendency to produce rhythm disturbances.

#### SUMMARY

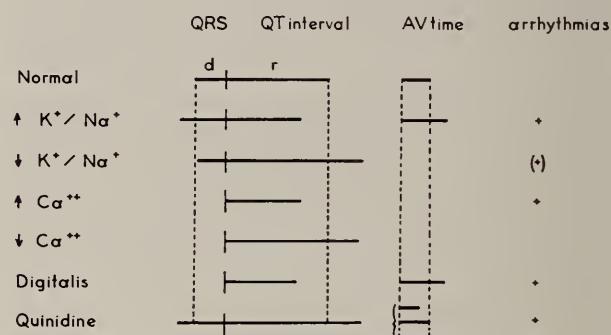


FIG. 5. Diagrammatic summary of the effect of the common electrolyte disturbances and common cardiographic drugs on QRS and QT intervals, AV nodal conduction time and the genesis of cardiac arrhythmias.

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## CLINICOPATHOLOGIC CONFERENCE

### Veterans Administration Medical Group Teaching Hospital Carcinoma of the Pancreas\*

**Present Illness.** This 74 year old Negro developed aching left chest pain one to two months prior to admission. This radiated into his back, upper abdomen, and hips and became worse on deep breathing. The epigastric pain was not relieved by eating or alkali. He denied nausea, vomiting, or hematemesis, but had lost much weight, weighing only 90 pounds on admission.

**Examination.** T., P., and R. were normal. B.P. was 165/60. The patient was described as poorly nourished and thin. Examination of the head was not remarkable except for poor oral hygiene and arcus senilis. The lungs were clear. The heart was not enlarged but a Grade III systolic murmur was present at the apex. The remainder of the examination disclosed only an enlarged prostate, a small right hydrocele, and reduced peripheral pulses.

**Laboratory Data.** The WBC. was 5000 with 59% polys, HCT. of 29%, Hgb. of 9.3 Gm., and platelets of 220,000. Occasional target cells were present. Urinalysis showed a reaction of 6.0, sp. gr. 1.014, and negative microscopic findings. BUN. was 14, bilirubin 0.54 mg., and total protein 7.7 Gm. with 3.9 Gm. globulin per 100 ml. Alkaline phosphatase was 4.5 BU. Red cell indices were MCV 88, MCHC 31, MCH 27; sickle cell preparation was negative. Direct Coomb's test was negative, as were serum ISO- and AUTO- warm and cold agglutinations negative. Stools were guaiac negative. Sputum smears and cultures were negative for acid-fast and fungus organisms. Bone marrow preparation was nondiagnostic but showed erythroid hyperplasia and a relative increase in plasma cells. Calcium was 10 and phosphorous 2.8 mg. per 100 ml. A 24 hour urine for urobilinogen was 0.098 mg. STS was negative. Repeat red cell indices were MCV 92, MCHC 32 and MCH 28.8 and still later MCV 73, MCH 26 and MCHC 36. L-E prep. was negative. Total blood volume (Cr-51) was 74 ml/kg.

Chest x-ray, barium enema, upper GI series, and oral cholecystogram were negative. An EKG. revealed changes in ST-T waves suggesting myocardial ischemia.

At this point the patient was given a month's leave. When he returned he complained of dyspnea and shortness of breath. He had developed a cough and production of yellowish-white phlegm. He denied fever. He still had his chest and epigastric pains.

Significant changes in the examination included

a B.P. of 140/90, more loss of weight which was now 78 pounds. He appeared much more ill than before and was dehydrated. Moist rales were present in the lung bases.

The significant laboratory data of this final admission were RBC. of 3.31 million, HCT. 29%, and Hgb. 9.4 Gm., platelets 206,000. BUN. was 30 mg. Red cell indices were MCV 88, MCH 26, MCHC 30, and reticulocytes 0.2%, SGOT test was 58 units, alkaline phosphatase 20.2 BU., BSP. 18%, thymol turbidity 6 units, cephalin flocculation 3+ in 48 hours, and bilirubin 0.8 mg. Again sputum studies for acid-fast and fungus organisms were negative. Calcium was 9.2 and phosphorous 3.06 mg. per 100 ml. Bence-Jones protein test was negative.

A chest x-ray on this admission showed a mottled infiltrate throughout both lungs. A metastatic survey showed small radiolucencies in the skull, thought to be venous lakes; some osteoporosis was present. Repeat chest films revealed the above described infiltrates. An EKG. was similar to the previous one.

**Hospital Course.** The final hospital stay covered 3 weeks. He spiked occasional temperatures to 100-101°. He was not given antibiotics until 6 days before death when INH was begun. PPD and histoplasmin skin tests had been negative. The INH did not influence the temperature elevations. Prothrombin time was 54%, amylase 30 units; a two hour PPBS was 195 mg%. Hemoglobin values dropped slowly, and he expired quietly about 4 months after onset of symptoms.

### Clinical Discussion

**DR. COPE:** This patient was an elderly Negro man who presented with three main signs and symptoms, namely, aches and pains, a low grade anemia and marked weight loss. I will try to discuss the aches and pains to start with. They were up in the chest, the back, the abdomen, and the hips. This kind of pain distribution is usually associated with disease in the spine. It is affected by deep breathing, by movement, and is fairly constant; it was present through the rest of the patient's admission. So, I place the patient's initial symptoms as arising in the spine. Possibilities that come to mind, naturally, are multiple myeloma, carcinoma, or possible osteoarthritis. What about the weight loss? I think the weight loss is very significant. It is rather uncommon to see patients weighing 78 pounds. We do not know the height of this patient, but even if he were a 120 pounder to start with, he seems to have suffered a tremendous weight loss. We don't know too much about his intake of food at home, and

\*From the Medical Service and Laboratory Service, Veterans Administration Medical Teaching Group Hospital, Memphis, Tennessee.

we do not know whether he had anorexia or not. There are many conditions that cause anorexia such as anorexia nervosa as seen in young women, and metabolic diseases like Addison's disease and hypopituitarism. I don't think this patient had Addison's disease:—for example his blood sugar was quite high—195 mg.%, there was no evidence of pigmentation of the buccal membrane and his blood pressure was not low enough. Other causes of weight loss are lack of digestive ferments, as seen in chronic pancreatitis, biliary obstruction and biliary fistula. Weight loss is also seen in malabsorption problems such as Whipple's disease, sprue, and chronic diseases associated with diarrhea. I thought of Whipple's disease in association with this patient. It may cause marked weight loss, and some anemia. However, the patient had no adenopathy, no arthralgia, and no diarrhea, and so I think we can rule out Whipple's disease.

How about inadequate food utilization? We know there are certain metabolic diseases involved in this. For example, hyperthyroidism can cause tremendous loss of weight. We have no evidence of this in this patient. Also, diabetic acidosis, but we find that this patient was probably not a diabetic.

Now, what is the cardiac status of this elderly patient? We are told that his blood pressure was 165/60, which is approximately normal for his age group. He probably had peripheral arteriosclerosis and pipe-stem arteries. We are told he had a Grade III systolic murmur; with an anemia and with so much loss of weight I would think that a Grade III systolic murmur probably would not be significant. As we know, the intensity of a murmur does not correlate too well with whether there is disease in the heart or not. It has a lot to do with what there is between the stethoscope and the heart, such as lung, fat, and muscle mass. Of course, we have to think of the possibility of subacute bacterial endocarditis: this patient had anemia, he had weight loss. The pain, however, does not seem to fit in too well with this diagnosis. He had no fever, but among the older age group fever is often not seen; he had no evidence of

peripheral embolization and the heart murmurs apparently were not changing in character so I think I can rule out this diagnosis fairly well. The ST-T changes probably were nonspecific changes since they were present at the subsequent admission, unchanged. What about anemia in this patient? He had normal red cell indices so we can say he had a normocytic anemia. What causes normocytic anemia? We have three classes of disease that can cause this: (a) acute blood loss of which we have no evidence here;—the patient's stool guaiac was negative; (b) hemolytic disease causing blood destruction—we have no evidence of this;—the Coomb's test was negative, the bilirubin was normal, the urobilinogen was normal, agglutinins were negative; generally, there was no evidence for a hemolytic anemia, so we are left with a simple normocytic anemia; and (c) in this group can be lumped many different types of diseases—anything from a red cell aplasia caused by a thymoma, for which we have no evidence, to vitamin deficiency, renal insufficiency, G. I. disorders, endocrine disorders, inflammatory diseases and malignancies.

What about granulomatous diseases like tuberculosis or histoplasmosis? This patient had no fever, he had no hepatosplenomegaly, his skin tests were negative. Of course, none of these things rule out these diseases. I will come back to this later on.

How about malignancies? This case probably is an example of a generalized malignancy. What is the cause of anemia in malignancy? I don't know that this has been worked out too well in cases where there is no obvious blood loss. Life spans of blood cells have been done, and these vary from normal to slightly shortened span; apparently there is little to no destruction of blood cells and generally it seems to be a matter of the marrow not being able to catch up with normal blood destruction.

I cannot understand why this patient was sent home on a month's leave considering that he was quite sick and undiagnosed. He came back a month later and this time was very ill. He had marked changes in liver function, his alkaline phosphatase was significantly elevated, BSP. was high, thymol

turbidity was slightly high, cephalin flocculation was 3+, but bilirubin was again normal. This picture brings to mind a very diffuse involvement of the liver. We also have evidence that the chest x-ray for the first time showed diffuse involvement with some kind of process. Can we see the chest x-ray now?

DR. ETTMAN: The first film we have here is one taken during the earlier admission when it was reported as negative. The heart was not enlarged and the lung fields at that time showed no definite infiltration. Two months later we see now there has been a definite change. There are granular infiltrates scattered through both lung fields. There is an infiltration seen in both bases and the infiltrate is rather symmetrical. The next film was taken 4 days later, and shows progression of the same changes. The last chest film we have available is 10 days later. Here, in addition to the infiltration, we have pulmonary edema and excessive congestion. Next is the skull film taken during the metastatic survey showing the osteoporosis with some small ovoid radiolucencies which are consistent with vascular channels. The long bones show nothing remarkable. The spine shows marked degenerative changes. The changes in the chest films are very consistent with pulmonary congestion, miliary tuberculosis, histoplasmosis, numerous emboli, possibly carcinomatosis and a whole gamut of things. At least we know it developed in a short period of time.

DR. COPE: Can you say anything about these calcifications in the lungs?

DR. ETTMAN: These are old and are present on the chest film taken during the previous admission. These infiltrates are of more recent vintage.

DR. COPE: We have to account now for a picture of the patient showing marked weight loss, low grade anemia, infiltration of the liver and lungs, and possible cardiac disease. I think we will go through some of the diseases that come to mind. Sarcoidosis: this is a disease which affects multiple systems. However, it usually occurs in the younger age group, and of course it usually does not affect the spine. Multiple myeloma: it looks as if the physicians on the

wards thought that this patient might have multiple myeloma. He has typical symptoms affecting the spine. He has slightly increased globulin. He has a low grade anemia, bone marrow showed slightly increased plasma cells. Bone marrow aspiration is often confusing because the marrow has quite a variegated population; therefore it is only a sampling procedure; multiple myeloma can exist with marrow plasma cells varying from 5% and up. What I would like to have in this case would be the electrophoretic pattern. Osserman has said that up to 97% of cases of multiple myeloma can be diagnosed just by either serum or urine electrophoretic patterns. If this patient did have multiple myeloma, it would be rather hard to explain the chest and liver findings. However, the patient could also have paramyloidosis; this is present in about 10% of multiple myeloma and affects mesodermal tissues, such as lungs, heart, liver, gut, adrenals and kidneys. I would like to see, however, a little more albuminuria. The diagnosis of multiple myeloma with amyloidosis—I don't think can be ruled out in this particular patient.

How about something like Wegener's granulomatosis? This is akin to periarteritis nodosa. It affects the lungs. It is a disease that is quite fulminating, characterized by ulceration of the upper respiratory tract, occasionally pancreatitis. However, the death in most of these patients is a renal death and we have no evidence for this.

How about a lymphoma? Lymphoma can affect bone diffusely and can cause anemia. Occasionally, but very rarely, it is manifested by a peripheral adenopathy or splenomegaly. Lymphomas are occasionally associated with fungal diseases or tuberculosis, and this patient could possibly have a combination of these. The physicians on the ward thought this patient might have disseminated tuberculosis, probably for lack of a better diagnosis. However, the isoniazid for a period of a week did not seem to improve this patient's condition. Again, disseminated tuberculosis would not account for the patient's rapid course unless he had a meningitis, nor would it account for his diffuse aches and pains.

Finally, I come to my final impression

which is metastatic disease. I think statistically this probably would be the most common disease that would account for this picture:—anemia, weight loss and pain, probably caused by metastasis to the bone which may not be visible on x-ray, and in the last month, metastatic involvement affecting the liver and lungs. A small primary lesion could be in a host of places such as the pancreas, the lung, the stomach, prostate, and so on.

My final diagnosis is disseminated carcinomatosis with a small primary, probably, let's say, in the pancreas.

#### Pathologic Findings

DR. MASHBURN: At the time of autopsy the body was that of an elderly, severely emaciated colored male who was 5 ft. 6 in. in height and weighed 78 lbs. Both lungs were heavy, the right weighing 800 Gm. and the left weighing 600 Gm. The cut surface of each was red and meaty. Pressure produced a profuse amount of edema fluid. Microscopic investigation revealed septa which were thickened with congestion and infiltration of inflammatory cells. Polymorphonuclear leukocytes and macrophages were prominent in many alveolar spaces. The most striking microscopic finding of the lungs was the presence of large, abnormal, epithelial-like cells located in some of the lymphatics and alveolar spaces. These cells were characterized by large hyperchromatic nuclei and moderately abundant basophilic cytoplasm. Some were arranged in an acinar pattern. From this picture it is obvious that we are dealing with a metastatic adenocarcinoma in the lung.

The heart weighed 210 Gm. Small vegetations were found attached to the auricular side of the mitral valve. These vegetations were soft, light pink, and slightly granular. There is actually very little inflammatory reaction in this lesion. A similar type of bland vegetation was found attached to the ventricular surfaces of the aortic valve cusps (Fig. 1). Microscopic studies of these lesions confirmed the absence of any extensive inflammatory change within the tissue involved.

The liver weighed 1200 Gm. and was studied with numerous metastatic tumor nod-

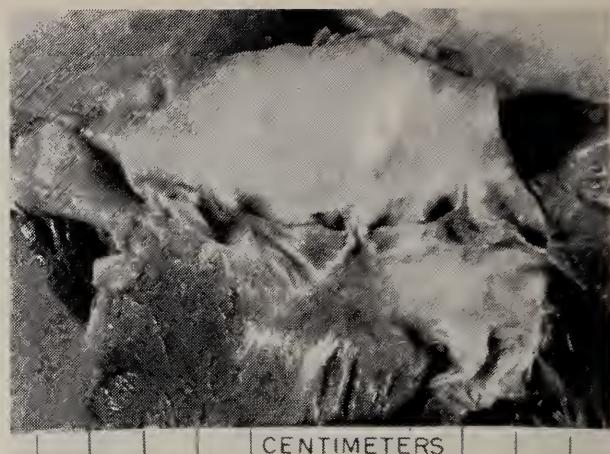


FIG. 1. Aortic valve with vegetation attached to left posterior cusp.

ules. These nodules were yellow in color and umbilicated on the surface. Examination of the pancreas revealed a 5 by 6 by 4 cm. yellow, sclerotic tumor mass replacing the tail. The microscopic picture of the tumor within this organ shows numerous irregular acini replacing normal tissue and producing an intensive desmoplastic reaction (Fig. 2). Each kidney contained a recent 2 cm. infarction in the cortex. Microscopic analysis revealed coagulation necrosis with peripheral hemorrhage and congestion, typical of embolic infarction.

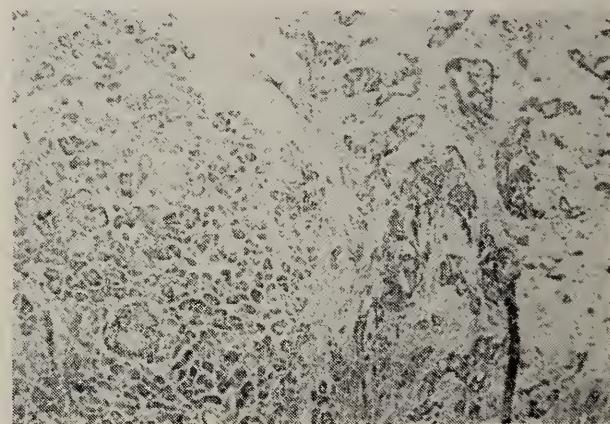


FIG. 2. Pancreas showing partial replacement by adenocarcinoma.

In attempting to correlate all of the findings in this case a study of endocarditis is necessary. A brief historical review of this lesion may help us to understand the problem somewhat better.

In 1923, Libman performed a considerable service to the medical profession when he reviewed this problem and came up with his four specific types of endocarditis, or

valvulitis. The first three, namely bacterial endocarditis, rheumatic endocarditis, and syphilitic endocarditis, were due either directly or indirectly to some type of bacterial infection. The fourth group he described as a nonbacterial independent type. Within this last group he described two entities. The first was called a typical verrucal endocarditis which is commonly known as the Libman-Sacks endocarditis. This is associated with lupus erythematosus. The second type within the fourth group was called nonbacterial thrombotic endocarditis. Through the years this last named lesion has come to be associated in the thinking of most physicians with wasting diseases in aged people. However, an interesting article in 1956, by McDonald and Robbins<sup>1</sup>, attempted to correct some of the misconceptions about this type of valvular lesion. First of all, their statistics show that nonbacterial thrombotic endocarditis is not necessarily a lesion of debilitated and aged patients. In their series of 78 cases of nonbacterial thrombotic endocarditis, there were 6 who were under the age of 40 years. The second point that was made by these authors is that these cases are not always associated with wasting malignant disease. Although 37% of their series was associated with cancer, 30% was involved with some form of heart failure and another 20% suffered with thromboembolic diseases as their primary disorder. The remainder of the cases revealed conditions such as simple pneumonia, hepatitis, and liver abscess. Thirdly, it was shown that patients with nonbacterial thrombotic endocarditis not infrequently developed symptoms and signs specifically related to this lesion. Usually these are embolic phenomena. Eleven of their 78 cases were proven to have emboli from these vegetations, and 5 of the 11 had developed symptoms of embolism prior to death. They thought that the death of these 5 was due directly to the nonbacterial thrombotic endocarditis.

From this study we can see that nonbac-

terial thrombotic endocarditis is not just a medical curiosity of interest only to the pathologists. The practicing physician should be aware of its possibility in a relatively young patient who presents with some form of severe disease followed by unexplained heart murmurs and embolic symptoms.

Attempts at explaining the cause of these vegetations are only speculative. Some investigators have pointed out that close examination of normal hearts will demonstrate small degenerative lesions with fibrosis in the valves on the left side in over 50% of all cases. Correlating the facts that 99% of these degenerative lesions occur on the left side of the heart, and that 97% of all the nonbacterial thrombotic endocarditis lesions are also on the left side, it has been suggested that these small, otherwise benign, degenerative areas of fibrosis set the stage for the vegetations. It has been postulated that various severe diseases may produce fluctuating alterations in the blood coagulating mechanisms followed by the occurrence of the nonbacterial thrombotic vegetations at the sites of these small degenerative foci in the valves of the left heart.

In conclusion, then, we believe that this individual first of all developed an adenocarcinoma of the tail of the pancreas with metastases to the liver and lungs; secondly, he developed nonbacterial thrombotic endocarditis with embolic infarctions of both kidneys; and, finally, that the immediate cause of death was lobular pneumonia.

#### Final Anatomic Diagnoses

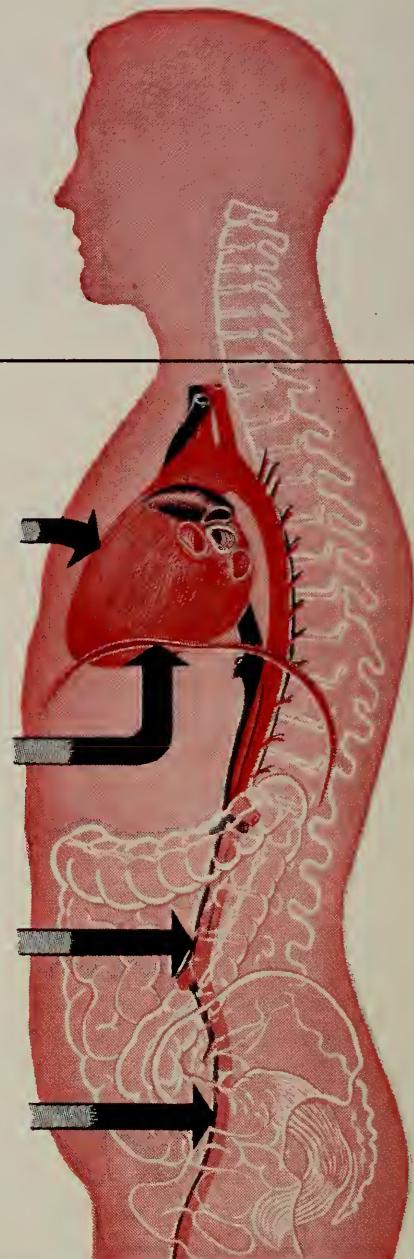
- (1.) Adenocarcinoma of the tail of the pancreas with metastases to lungs and liver.
- (2.) Nonbacterial thrombotic endocarditis involving the aortic and mitral valves with infarcts of the left and right kidneys.
- (3.) Lobular pneumonia, bilateral.

#### Reference

1. McDonald, R. A. and Robbins, S. L. "The Significance of Nonbacterial Thrombotic Endocarditis: An Autopsy and Clinical Study of 78 Cases." Ann. Int. Med. 46: 1957.

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*From the  
Executive  
Director*

# THE MEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### TMA State and County Society Officers Conference a Success

### Drug Abuse Law to Affect Few Physicians

### Medicare—Part B Intermediaries Chosen

### Medicare Deadline

### Tennessee Hospital Association Takes Action in Opposition To TMA Policy

● On February 27th, the State and County Society Officers Conference, sponsored by the Tennessee Medical Association, was the largest attended of any previous conference. Two hundred key leaders of the profession throughout the State were in attendance to hear twelve guest speakers from Tennessee and the nation, including Dr. Edward R. Annis, Past President of the American Medical Association. Comments from many attending the conference stated that it was the best ever held by TMA.

● The Drug Abuse Control Amendment of 1965, which strengthens controls over depressants and stimulants, became effective February 1st, and will bring about some changes in the procedure physicians have followed in writing prescriptions and keeping inventories. The law affects physicians in several ways. Telephone prescriptions are permitted. Written prescriptions must include the patient's name and address and the date.

Prescriptions for drugs covered by the law (amphetamines, barbiturates, and other psychotoxic drugs) will be refillable only five times or for a six month period—whichever is less. Those few physicians who dispense such drugs as part of their regular professional activities and charge for them must keep detail acquisition and disposition records. Records should be kept of dates, quantities and persons or firms involved in such transaction — including even those covered drugs obtained from pharmacists when used in the physician's practice.

Physician officials and clinics, dispensaries, hospitals or other health facilities where no registered pharmacist is in charge of covered drugs should understand that they continue to retain inventory liability and responsibility when such drugs are left in charge of others who possess and handle them only as agent or ancillaries of the physician.

● The Social Security Administration has announced the appointment of the fiscal intermediaries for Part B, Public Law 89-97, Medicare. Named to handle the payments to physicians in Tennessee was the Equitable Life Assurance Society of the United States. Initial liaison with the fiscal intermediary is already underway by officers and appropriate committees.

● March 31, 1966, was the deadline for eligible persons to enroll in the "Part B" supplementary program for Medicare. The Social Security Administration states that those who did not sign up by the March 31st deadline will have to wait two years for another opportunity to do so.

● The Tennessee Hospital Association's House of Delegates, meeting in Nashville on February 25, 1966, took action directly opposing policies previously adopted by the Tennessee Medical Association and the American Medical Association as related to contractual arrangements between hospitals and hospital-based specialists. Following is the

- action adopted by the Tennessee Hospital Association:
1. The traditional contract of percentage arrangements between hospitals and hospital-based specialists is ethical, in the best interest of the public we serve, and is not inconsistent with the purposes of the laws covering the Corporate Practice of Medicine.
  2. Should the Tennessee Medical Association retain its present published position regarding separate billing by the Medical Specialists and/or take positive action, the Board of Trustees of the Tennessee Medical Association should be invited to join with the Board of Trustees of the Tennessee Hospital Association in a public hearing with representatives invited from large manufacturing and industrial firms; other interested segments of the public; representatives from the insurance industry; representatives from Blue Cross; and representatives from the news media; in order to give the hospitals and doctors an opportunity to explain the effect this change would have upon the level of the charge of the patient or to whomever pays the patient's bill.
  3. The Tennessee Hospital Association opposes any lease arrangement as being contrary to the public interest and may give rise to the loss of tax exemption for the leased portion of the hospital property.

#### TMA's Position

- The TMA House of Delegates, in 1960, initiated action and stated the policy for TMA that "the employment or use of a physician by a corporation, institution or agency which permits the sale of the service of that physician for a fee is contrary both to the public interest and that of medicine and is in violation of medical ethics and the statutes of the State of Tennessee." Subsequent action has reiterated this position.

#### Tennessee Supreme Court Opinion

- The following statement with respect to Corporate Practice of Medicine was accepted from a Tennessee Supreme Court opinion (State ex Rel. V. National Optical Stores Co., 189 Tenn. 433-1949):

"A corporation can neither practice law nor hire lawyers to carry on the business of practicing law for it anymore than it can practice medicine or dentistry by hiring doctors or dentists to act for it . . . the rule is uniform that a corporation cannot practice one of the learned professions . . . and obviously, this implies that the corporation cannot employ a licensed practitioner since a corporation acts only through agents . . . if such a course were sanctioned, the logical results would be that corporations and business partnerships might practice law, medicine, dentistry or any other profession by the simple expedient of employing licensed agents. And if this were permitted, professional standards would be practically destroyed, and professions requiring special training would be commercialized, to the public detriment. The ethics of any profession is based upon personal or individual responsibility. Hence he cannot properly act in the practice of his vocation as an agent of a corporation or business partnership whose interest in the very nature of the case are commercial in character."

The Tennessee Medical Association has clearly stood by the principles of medical ethics and the statutes of the State of Tennessee in its position regarding the relationship of physicians with hospitals and other institutions as they relate to the corporate practice of medicine.

#### The Dependent's Medical Care Program

- For the year 1965, recipients under the Dependent's Medical Care Program cared for by Tennessee physicians resulted in 6,997 cases cared for representing a total payment to Tennessee physicians of \$563,751.09.

# Public Service

## THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

### TMA Delegation Visits Washington

- A delegation of twenty-six members of TMA and of three allied health organizations visited Washington, D. C. March 31st for a one-day visit with Tennessee's congressional representatives.

The president of the Tennessee Pharmaceutical Association Dr. Ed Daniel of Nashville, the president of the Tennessee Hospital Association, Mr. Tom Newland of Knoxville, and the president of the Tennessee Veterinary Medical Association, Dr. J. C. Kile, Jr., joined TMA representatives for the sixth annual trip.

Representing TMA were President John H. Burkhart of Knoxville, and President-elect G. Baker Hubbard of Jackson, along with Drs. Harmon L. Monroe and James J. Range of the first congressional district, Richard C. Sexton, Jr. of the second district, George K. Henshall, George C. Young and David H. Turner of the third district, D. Gordon Petty and William A. Hensley of the fourth district, Tom E. Nesbitt and B. F. Byrd, Jr. of the fifth district, Kenneth M. Kressenberg of the sixth district, Lamb B. Myhr and Oscar M. McCallum of the seventh district, Byron O. Garner and J. Kelley Avery of the eighth district and A. Roy Tyrer, Jr. and B. G. Mitchell representing the ninth congressional district.

Mr. Charles Cornelius, Jr., TMA attorney, Mrs. Flora Richardson, Executive Secretary of the Chattanooga-Hamilton County Medical Society, Mr. J. E. Ballentine, Executive Director of TMA and Mr. Hadley Williams, TMA Public Service Director also accompanied the group.

Dr. Roy Tyrer, chairman of the TMA Legislative and Public Policy Committee, under whose sponsorship the trip is made, presided over a luncheon meeting in the House Speakers Dining Room. Members of the Tennessee congressional delegation present were Senator Ross Bass and Congressmen James Quillen, John Duncan, Bill Brock, Joe Evins, Richard Fulton, William R. Anderson, "Fats" Everett and George Grider.

Members of the TMA group visited individually with their respective Congressmen during the course of the day to discuss legislation of interest to the medical profession.

- Tennessee's three medical schools received a total of \$32,817.90 from the American Medical Association's Education and Research Foundation as part of the \$1,133,583.29 distributed to all medical schools from contributions to AMA-ERF in 1965.

The University of Tennessee College of Medicine received \$15,097.27, Vanderbilt University School of Medicine \$11,797.19 and Meharry Medical College \$5,923.44.

Since 1951, the AMA-ERF has distributed more than \$17 million through its Funds for Medical Schools program. Medical school deans may use the money on a completely unrestricted basis.

Contributors to AMA-ERF can designate a specific school to receive their gifts, or they can give without designation. All monies contributed with a specific school named goes to that school plus a share of all undesignated contributions pro-rated to the 88 approved medical schools.

### AMA-ERF Allots \$32,817.90 to Medical Schools in Tennessee

Because the AMA and state medical societies assume all costs of administering the program, none of the contributed money is used for expenses of collection and distribution. Make a contribution to AMA-ERF during 1966!

## Health Project Contest Winners Announced

- The Biology class of Grundy County High School has been named winner of the 13th annual Health Project Contest sponsored by TMA and the Woman's Auxiliary to TMA.

The winning entry was entitled "Alcohol and Youth" and the class sponsor was Mrs. J. C. Ray. Mrs. Ray and Grundy County High School are not newcomers to the annual contest. In 1964 Mrs. Ray's class was declared winner of the contest and in 1965 they placed second.

Two student representatives of the class and Mrs. Ray received all-expense paid trips to the TMA annual meeting in Gatlinburg to receive their \$500 first place prize.

The 1965 winner, Hamilton High School of Memphis, placed second in this year's contest. Miss Martha Flowers was class sponsor for a project entitled "Personal Health" and will receive a \$300.00 prize.

Mrs. Joan Murchison sponsored two entries from Sherwood Junior High School in Memphis and won third and fifth place. "Breakfast for Better Grades" won third place and a check for \$200.00 while the project "Smoking in Sherwood Junior High" was awarded fifth place and \$100.00.

The fourth place award of \$150.00 went to Knoxville's Central High School for a project entitled "Alcoholism" sponsored by Mr. C. W. Pratt.

Mrs. Richard C. Sexton, Jr., of Knoxville, was the Auxiliary's State Health Project Contest Chairman.

- A news release from the AMA regarding safety in track and field points out that safety is a major consideration as a million school and college athletes compete in track and field this Spring.

The flying javelin, shot put and discus can be lethal weapons. Even a runner can inflict serious injury to bystanders, fellow athletes and himself on a poorly supervised track.

TMA members who serve as team physicians for high school athletic teams should call to the attention of the school officials the dangers involved in conducting track and field practice and track meets. Some suggestions that might save an injury include:

1. The field area should be laid out so that danger zones of adjacent events do not overlap.
2. Competitors should be matched and scheduled by skill level, both for instructional and safety reasons.
3. Until he improves his skill, the beginning discus thrower should use a rubber practice discus. He should throw only into a protected area, such as a hanging net.
4. Equipment and track should be examined often.
5. Beginning hurdlers should practice on grass, with demountable hurdle crossbars.

Many other considerations should be part of a track and field safety plan. Spring practice should begin with a complete medical evaluation of every athlete that competes in track or any other spring sports program.

- The annual AMPAC National Workshop has been scheduled for May 21-22 at the Sheraton-Park Hotel in Washington, D. C.

This educational program has been designed to bring to the participants the latest in political techniques and methods. How to work with the candidate, work with the party and capsule campaign techniques for congressional district committees are topics to be discussed at the meeting.

Physicians interested in attending the workshop may obtain additional information by contacting Dr. B. G. Mitchell of Memphis, state chairman of Independent Medicine's Political Action Committee of Tennessee.

## Safety Programs Needed for Spring Sporting Events

## AMPAC Workshop Set for May 21-22

# President's Page



DR. BURKHART

A year can be a short time or it can be a long time, depending on the pleasure or pain for which it is remembered. The year just past, during which it has been my honor and privilege to serve as the President of the Tennessee Medical Association, has demanded from me much time, thought, and effort; and yet it has been most pleasant and altogether too short. The hardest job has been to write the President's Page each month; the easiest has been the association with a group of men and women who individually and collectively epitomize the highest motives, ideals, and aspirations of a noble profession.

In leaving the office of President and turning over its responsibilities to my successor, it is my sincere hope that I have carried out its duties and fulfilled its obligations in a manner which meets with the satisfaction of those who saw fit to place them in my care. If I have, it is largely due to the advice, assistance, co-operation, and support of physicians throughout the state of Tennessee who have served in positions of trust as officers, committee chairmen, and committee members, and through the intense efforts of a most loyal and dedicated administrative staff. To all of these who have made this past year so pleasant and who are so greatly responsible for any degree of success which it might have attained, I wish to express my sincere appreciation.

To Dr. Hubbard who will succeed me in this high and honorable office I extend my congratulations, best wishes, and assurances of continued interest and availability in any capacity wherein he might feel I could serve him and the Tennessee Medical Association. Dr. Hubbard is entirely capable and qualified to be the head of the profession in our state. He is entitled to the interest, enthusiasm, and co-operation of all of us in carrying out the purposes of the Tennessee Medical Association.

Another year is behind us, another year is ahead. The Tennessee Medical Association must meet its future challenges and requirements as it has met those in the past. I am confident that it will.

President

## THE NEW PRESIDENT



GEORGE BAKER HUBBARD, SR., M.D.

JACKSON

# GEORGE BAKER HUBBARD, SR., M. D.

*78th President, Tennessee Medical Association*

 HIS WEST Tennessee surgeon exemplifies the highest standards of the medical profession, and at the same time represents what his community points to with pride: a civic-minded, dedicated physician.

He has the respect and admiration of his colleagues, patients, office and hospital personnel, and fellow citizens. His energy and devotion to all projects in which he is active—and there are many—are equalled only by his medical ability. Perhaps his major quality is empathy.

Born in Princeton, Kentucky, September 3, 1912, Dr. Hubbard received his B.S. degree from Western Kentucky State College in 1933. After graduating from Vanderbilt University School of Medicine in 1937, he was an intern and resident in pediatrics and general surgery at Vanderbilt and Nashville General Hospitals until 1941.

Entering military service in 1941, he was a lieutenant colonel in the U.S. Army Medical Corps, assigned as consultant traumatic surgeon at the 803rd Hospital Center in Southern England until 1946.

For the past twenty years he has practiced general surgery at the Jackson Clinic, Jackson, Tennessee, with eighteen other physicians representing nine fields of medicine. He is a member of the Clinic's Board of Directors, of which he is a past chairman.

Professional posts he has held include: 1963 president of the Tennessee Chapter, American College of Surgeons; 1962-63 chairman of the ACS Committee on Trauma for Tennessee; chief of staff, Jackson-Madison County General Hospital; member of the TMA Board of Trustees; official positions in the Consolidated Medical Association of West Tennessee; and numerous TMA and Consolidated Medical Assembly committee appointments.

In addition he has served as a member of the Tennessee Hospital Service Association (Blue Cross-Blue Shield) Board of Directors, has served as a member of the Board of Stewards of the First Methodist Church of Jackson, and is an active member of the Jackson Chamber of Commerce.

One of Dr. Hubbard's favorite activities is his work with young people, particularly high school football teams. He attends the Jackson High School games, giving encouragement to the home team and medical attention to players on both teams, when needed. In recognition of his devoted and inspiring work, a plaque was presented to Dr. Hubbard last year by the high school teams, expressing the esteem in which he is held by football, basketball, baseball and track participants.

He and Mrs. Hubbard, the former Elizabeth Beesley of Nashville, live at 1681 Humboldt Highway. They have four children: George Baker Hubbard, Jr., a second-year student at Vanderbilt School of Medicine; Bill, a sophomore at Southwestern University, Memphis; Al, a football scholarship freshman at Vanderbilt University; and Betha, a junior at Jackson High School.

During his twenty-nine years as a physician Dr. Hubbard has demonstrated tireless determination to alleviate pain and to restore health, to serve his community, and to inspire others to use their various abilities to the fullest. His integrity, energy and dedication will be demonstrated anew during his term as Tennessee Medical Association president.

# THE JOURNAL

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(Specialty Society Representatives to be named)

APRIL, 1966

## EDITORIAL

### A PROPOSAL FOR A NEW SPECIALTY— INTERPRETIVE MEDICINE!

To propose a new specialty in medicine even with tongue-in-cheek requires temerity in this day and age when there is clamor here and there that the pieces of the "fragmented" patient be picked up and be put together as a "whole person," which by now has become a cliche. Without a doubt the patient does much of his own selection of specialists in the urban areas or, if living in the country, decides who should see him in the neighboring town, aided and abetted by magazines and specialists themselves.

Some months ago at a luncheon in a distant state, I sat next to an elderly gentleman, a doctor who had retired from general practice, or had attempted to do so for almost two years. He found it difficult to withdraw in two broad areas. One dealt with the area more or less of counselling; the other was related essentially to matters medical. He found it most difficult to turn

away or disregard requests from old patient-friends.

This doctor told stories which were examples of how his old friends needed someone to whom to turn, other than the younger man to whom he had referred his patients. I cannot quote directly but they were somewhat as follow. A former patient, after church services, wanted advice about Aunt Susie who needed to be put into a mental institution. Another visited his home to talk over worries about the approaching senility of a spouse. A former patient stopped the doctor on the street to discuss a son who was having difficulties in finding his niche in society. Another, a mother, called about a daughter having marital troubles. Some of these had met with little response upon consulting their new doctor—who was either too busy or had not been tempered by experience to answer these questions and probably felt insecure in the field of counselling.

This retired doctor found the other area much more embarrassing—this was the truly medical area. Embarrassing because the calls and discussions were for opinions concerning medical care being given by the new doctor, the one to whom the retired doctor had referred his patient. What is the prognosis of the tumor discovered, or is the prognosis given correct? What does the diagnosis mean? Why was "such-and-such" done diagnostically? Why was "this-or-that" treatment given or prescribed? He found the obvious answer to this problem not readily acceptable. To refuse an answer and advice to again question the new doctor was not satisfying to the old friend. The common answer this retired doctor heard to his suggestions to again ask his new doctor these questions was all too often, "He is so busy; he hasn't the time." This one reads in the lay press also. Attention is called to this criticism in PR suggestions by organized medicine. If one has been a consultant with limited practice, one has heard, unfortunately, as the result of leisurely discussions with the patient, "I wish my doctor had time to talk to me like this. He hasn't time to listen to what I want to get off of my mind."

The early years in practice permit the

development of the practical use of methods and technics in searching out disease and its treatment. In spite of the younger man's impatience with needing to deal with the nonscientific phases of medicine he, in most instances, gradually and subconsciously learns his patients' needs for someone with whom to counsel. Here the answers commonly lie not in medicine but rather in common sense, which led Sir William Osler to suggest that "Common sense nerve fibers are seldom medullated before forty—they are never seen even with a microscope before twenty." I am sure Osler was not referring to professional competence, but rather to myelinization, as a result of accumulated experience of "burning one's fingers," misjudgements and the evolution of a sympathetic understanding of human foibles, frailties and dependencies. It is the building of the interpersonal relationships over the years—patient-doctor—which makes for good medical care,—first confidence and then acceptance of the need for a specific treatment or the operation.

The busy and good doctor recognizes he should, and sincerely wishes he might spend "more time" with his patients, but the exigencies of practice and a limited number of hours in the day set the limits. Without a doubt as greater numbers are gathered under the umbrella of federally supported medicine the manpower shortage will be accentuated in this regard.

After the luncheon conversation mentioned earlier, I thought how unfortunate is the waste of manpower as doctors are "put out to pasture." How badly do some of his friends and citizens of the community need their advice! So I propose a new specialty—*Interpretive Medicine!* As a physician retires from an association with a younger partner or from a group, he might be useful to his busy former associates as an *interpreter* of chronic disease and its treatment and its prognosis in selected cases. He could be helpful too in counselling on matters of the family and other interpersonal relationships. (Some day social workers may be available for counselling in these areas, but the climate at present and the feelings of the older generation of patients are not quite up to this solution, even if they were

available.) The *interpretive specialist* would need to continue his activities with his former colleagues almost exclusively for he would need to know their practices and methods so he might keep his finger *out* of the therapeutic pie. On the other hand, he should have the liberty of suggesting in his consultant's report that doing "so-and-so" might reassure the patient or complete the clinical picture. Certainly this *specialty* must be incorporated in some group practice already.

*Interpretive Medicine* is a thought from the "great blue yonder" and without anticipation of an American Board of Interpretive Medicine!

R. H. K.

For the physician who continues to be troubled by the term *atypical acid-fast bacilli*, the memorandum from the State Department of Public Health under the heading of *Medical News in Tennessee* may be helpful.

## DEATHS

**Dr. Alton Garrard Hair**, 60, Signal Mountain, died March 3rd in a local hospital.

**Dr. Tate Benton Collins**, Jackson, 78, died suddenly on February 19th at his home.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

### Chattanooga-Hamilton County Medical Society

The April 5th meeting of the Society was held in the auditorium of the Interstate Building. Scientific presentations included: "Clinical Investigation of New Drugs" by Dr. Delmas K. Kitchen; "Clinical Assessment of EEG" by Dr. Edwin F. Chobot, Jr.; and an interesting case report by Dr. Ernest C. Lineberger.

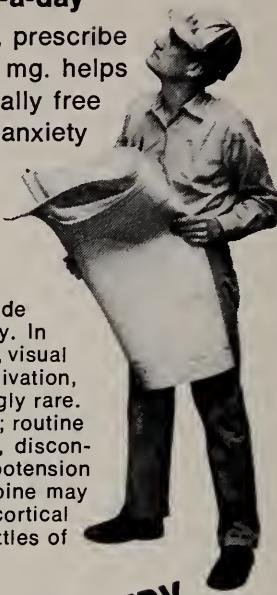
### Memphis-Shelby County Medical Society

The Society met in regular session on February 1st in the Institute of Pathology

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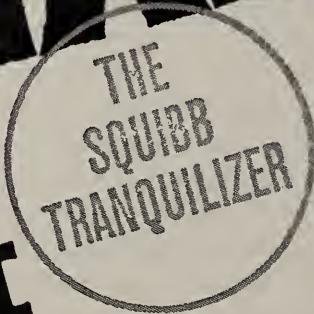
**Side Effects, Precautions, Contraindications:** As used for anxiety and tension, side effects are unlikely. Reversible extrapyramidal reactions may develop occasionally. In higher doses for psychotic disorders, patients may experience excessive drowsiness, visual blurring, dizziness, insomnia (rare), allergic skin reactions, nausea, anorexia, salivation, edema, perspiration, dry mouth, polyuria, hypotension. Jaundice has been exceedingly rare. Photosensitivity has not been reported. Blood dyscrasias occur with phenothiazines; routine blood counts are recommended. If symptoms of upper respiratory infection occur, discontinue the drug and institute appropriate treatment. Do not use epinephrine for hypotension which may appear in patients on large doses undergoing surgery. Effects of atropine may be potentiated. Do not use with high doses of hypnotics or in patients with subcortical brain damage. Use cautiously in convulsive disorders. Available: 1 mg. tablets. Bottles of 50 and 500. For full information, see Product Brief.



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of U.T. The scientific program was presented by Dr. Jeremiah Stamler who spoke on "Coronary Risk Factors and an Approach to Prevention of Myocardial Infarction." Members of the Society also heard discussions of the Drug Abuse Amendment of 1965 by Mr. Grover Bowles, and a report on the Memphis Prepaid Insurance Plan by Dr. R.A. Calandruccio.

### Knoxville Academy of Medicine

Dr. William G. Laing presented the scientific program at the meeting of the Academy on March 8th. Dr. Laing's subject was "Regional Enteritis Clinical Aspects and Presentation of Cases."

### Benton-Humphreys Medical Society

The Benton-Humphreys County Medical Society met on March 18th in New Johnsonville. Mr. Jack Ballentine, Executive Director of TMA, attended the meeting to discuss the activities of the State Association and held a question and answer session concerning P.L. 89-97 (Medicare), Title XIX and how it will affect physicians in Tennessee, methods to promote the most efficient utilization, the AMPAC and IMPACT organizations, and promotion of a better understanding of the attitude of doctors and their organizations on the local level.

### Giles County Medical Society

In a recent meeting, the Giles County Medical Society adopted a resolution to extend out-patient medical care to the wives and children of servicemen now serving in Viet Nam. The move is similar to the action taken recently by the Dickson County Medical Society.

## NATIONAL NEWS

### The Month in Washington

(From the Washington Office, AMA)

The Department of Health, Education and Welfare has issued strict guidelines prohibiting racial segregation in hospitals receiv-

ing money from the federal government. The department said in a policy statement that schools, hospitals and nursing homes must adhere to the guidelines to continue receiving federal funds under the Civil Rights Act of 1964.

Surgeon General William H. Stewart of the Public Health Service said more than 10,000 hospitals receiving federal funds had been sent new rules and compliance reports. He said such hospitals must not separate or discriminate on the basis of race or national origin in the care and treatment of patients.

Hospitals are being asked "whether patients are assigned to all rooms and facilities without regard to race, color, or national origin; whether all persons are allowed to use entrances, admission offices, waiting rooms, dining areas and cafeterias, toilets and lavatories, and other service facilities; whether the hospital accepts and approves applications for staff privileges and training without regard to race, color, or national origin; and other similar questions," according to the HEW statement. "An up-to-date patient census by race must be indicated on the questionnaire, as must a breakdown by race of physicians holding staff privileges.

"If evidence of discriminatory practice is indicated in the returned questionnaire, the specific areas of failure to comply will be pointed out. The hospital will then be given an opportunity to eliminate its discriminatory practices as quickly as possible. Where discrimination persists, the hospital will be excluded from any new federal assistance programs, such as Health Insurance for the Aged (Medicare), which begins on July 1. When negotiations fail to achieve compliance, steps will be taken . . . to terminate present assistance, or compliance will be secured through enforcement by the courts."

The Office of Equal Health Opportunity is administratively located in the Office of the Surgeon General and will be headed by Mr. Robert M. Nash. It will employ a staff with special competencies and responsibilities in review and investigation of complaints, evaluation of complaint and compliance reports, public information activities, fiscal and statistical analysis, com-

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pliance negotiations, and development of recommendations for corrective action within the law, and will include experts in such areas as law, contracts, professional education and project grants, hospitals and nursing homes, and state and local health agencies.

An Office of Equal Health Opportunity has been set up by the PHS to monitor compliance with the Civil Rights Law on behalf of all federal agencies in the health and medical fields. "The Public Health Service intends to exert every effort to see that discrimination with respect to race, color or national origin is halted in all health and medical institutions and agencies receiving federal assistance," Stewart said.



The Veterans Administration is planning a three-state test of a simplified method of administering its so-called "home town" program under which eligible veterans are treated by local physicians on a fee-for-service basis.

Alabama, Indiana and Colorado were selected for pilot programs beginning next July 1. VA officials are hopeful that they will prove so successful in four or five months that the simplified method can be used nationwide.

Under the experimental program, veterans entitled to treatment on a fee basis will receive an identification card stating the conditions for which he may be treated. Veterans then may seek treatment when they need it from doctors of individual choice. Doctors will treat the patient to the extent they believe is needed and bill the VA for "customary and usual" fees. Physicians will be asked to submit medical reports only when there is a significant change in a veteran's service-connected condition. A schedule of maximum fees will be maintained confidentially, by agreement with the state medical society, and fees in excess of the maximum will be reduced. If the cost of continuous treatment is expected to exceed \$30.00 per month, prior authorization from the VA will be required.



President Johnson is seeking Congres-

sional approval of a \$1 billion expansion of federal domestic health programs. In a domestic health message to Congress, Johnson estimated that such programs, after the expansion, would cost the federal government \$4.67 billion in the 1967 fiscal year beginning next July 1. In addition, medicare expenditures of social security tax funds are estimated at more than \$3 billion for the year. Johnson announced plans for:

—reorganization of health functions of the Department of Health, Education and Welfare—federal grants "to enable states and communities to plan the better use of manpower, facilities, and financial resources for comprehensive health services"—programs to strengthen the nation's system of health care—a three-year program of federal aid in training of more health workers—an increase in medical research—additional steps to meet specific health problems such as alcoholism, birth control, mental retardation and nutrition.

Johnson also said that in fiscal 1968 he wants to start "new state formula grants for comprehensive health services" and additional grants to states, communities and hospitals to meet special health problems.

"To strengthen the nation's system of health care, the President proposed federal aid in modernization of obsolete hospitals, aid to group practice clinics, and research and demonstration projects 'in the organization, financing, utilization and delivery of health services'."

But the program to provide government financing for group practice medical and dental centers ran into trouble in its first congressional test this year. Wilbur J. Cohen, Assistant HEW Secretary, acknowledged under sharp questioning before a House Housing Subcommittee that no figures are available—since 1959—on how many group practice clinics have been financed through regular bank loans. Cohen testified that in 1946 there were 400 clinics for group practice and "nearly 2,000 now based on a projection of a 1959 figure study."

Johnson announced that HEW Secretary John W. Gardner had been directed to: "—appoint an Advisory Committee on Alcoholism—establish in the Public Health Service a center for research on the cause, preven-

**to help relieve pain  
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**INDICATIONS:**  
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tion, control and treatment of alcoholism—develop an education program in order to foster public understanding based on scientific fact—work with public and private agencies on the state and local level include this disease in comprehensive health programs."

The President said administration plans call for "a sizeable increase" in expenditures for birth control research, training and services by the National Institute of Child Health and Human Development, HEW's Children Bureau and the Office of Economic Opportunity (poverty program).

## MEDICAL NEWS IN TENNESSEE

### University of Tennessee College of Medicine

Expansion of the University of Tennessee Medical Units in Memphis was among topics discussed at a recent meeting of the U.T. Board of Trustees. The 1,904 students at the Medical Units have made the complex one of the top five medical schools in the nation in enrollment. Most of the present facilities were the same in 1949-50 when enrollment in the College of Medicine increased from an average of 140 students to 200. Normal enrollment increases since 1950 have continued and space and other facilities are now at maximum use. The \$57 million capital improvement program, launched by UT last November is underway and will be shared by the medical units. Planned or proposed are a \$2.5 million student center, a new College of Nursing building, a new College of Pharmacy building, a physiology building, library additions, dormitories and housing for married students. Plans are also underway to purchase additional property to expand the campus and facilities.

Three of the staff have won continuing grants from the U. S. Public Health Service. Two are National Cancer Institute grants. One for \$15,475 for the seventh year of a study on hormone influence on mammary growth and carcinoma, to Dr. Richard

Moon and another for \$35,367 for the fourth year of studies for positive human leukemia viruses, to Dr. Donald Pinkel of St. Jude Hospital. The third, for \$10,960 from the Institute of Arthritis and Metabolic Diseases, was awarded Dr. Lester Van Middlesworth for the sixth year of studies on metabolism of thyroxine.

### Vanderbilt University's School of Medicine

A \$55,875 U. S. Public Health grant has been made for experimental studies into hereditary deafness. Dr. Freeman E. McConnell of the Bill Wilkerson Speech and Hearing Institute, in charge of the project.



Dr. I. S. Ravdin, Vice-President for Medical Affairs of the University of Pennsylvania, gave the 14th annual Barney Brooks Memorial Lecture on February 18. Following Dr. Ravdin's address a portrait of Dr. Alfred Blalock, the first resident surgeon (1925) of the "new Vanderbilt" was presented to the School and a conference room in the Department of Surgery was dedicated in his honor.



Gayle L. Gupton, National Director of the Muscular Dystrophy Association of America and of Nashville, presented a check for \$8,000, the 10th annual grant of the Muscular Dystrophy Association to the Vanderbilt research project on this disease, bringing the grand total to \$87,124. Mr. Gupton, Vice-President of Third National Bank in Nashville and also President of the Davidson County Chapter of the Muscular Dystrophy Association, presented the check to Dean Randolph Batson of the Vanderbilt School of Medicine and Dr. Jane H. Park of the Department of Physiology, who is the principal investigator on the project.



Chancellor Alexander Heard announced the appointment of Lester H. Smith, Jr. as Executive Officer of the School of Medicine and Hospital, as well as V. N. Patwardham as Professor of Nutrition, Department of Biochemistry. Mr. Patwardham has



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been serving as Chief of Nutrition with the World Health Organization in Geneva; he will direct Vanderbilt's nutrition research project in Cairo, Egypt. Assistant Professors were promoted to Associate Professors: Dr. Walter A. Bonney, Department of Obstetrics and Gynecology; Dr. Sarah H. Sell, Department of Pediatrics; Doctors Robert M. Heyssel, David H. Law, and Bruce Sinclair-Smith, all of the Department of Medicine.

### Meharry Medical College

Eight research grants have been awarded totaling approximately \$450,000. The grants, from HEW are for work in cardiology, biochemistry, pathology, dentistry, microbiology, surgery and general research. Dr. John Thomas, director of the Cardiovascular Research Center, has received \$89,000 in support of his work in renovascular hypertension. Dr. Isaac H. Miller of the biochemistry department was the recipient of a \$25,000 grant for his work with aromatic compounds and cancer. A \$20,000 award was made to Dr. Robert S. Rhodes of the pathology department for his studies of brain damage caused by jaundice. Dr. Elisha R. Richardson of the Dental School received \$109,000 to study the growth and development of the human head. \$116,000 has been awarded to Dr. Charles W. Johnson for his work on hypertension; he will also administer a \$51,000 grant for general research support. Dr. Eugenia Mobley of the Dental School will administer a \$28,000 general research grant in dentistry, and Dr. Matthew Walker a \$6,400 for a training program in surgery.



Dr. Henry T. Randall, Medical Director at Memorial Hospital for Cancer and Allied Diseases of New York City, delivered the annual Hale-McMillan Lecture on April 7th in the Public Health Lecture Hall of Meharry Medical College. Dr. Randall's subject was "Alterations in Body Function following Major Surgery for Cancer."

### Auto Crash Injury Research Project

The second "six-month" phase of an intensive four-year research study aimed at

helping to make automobiles safer for drivers and passengers began March 1st in the Tennessee Highway Patrol District No. 7. Headquarters are in Lawrenceburg and the survey will include the counties of Bedford, Giles, Hickman, Lawrence, Lewis, Lincoln, Marshall, Maury, Moore, Perry and Wayne. The special study of automobile accidents is a project of Cornell Aeronautical Laboratory, Inc. and is sponsored by the Highway Patrol, the Tennessee Medical Association, the Tennessee Department of Health, and the Tennessee Hospital Association.

### Atypical Acid-Fast Bacilli

Memorandum from the Tennessee Department of Public Health.

Recently, it became evident that a few of the physicians and personnel in Local Health Departments have not been currently informed of what we believe to be the recent status of the atypical acid-fast bacilli and what steps are being taken by the State Department of Public Health, Division of Tuberculosis Control, in our effort to deal effectively with these organisms that are now significantly complicating the diagnosis and treatment of tuberculosis.

In order to help those interested to understand better the procedures being used and recommendations being made in regard to these troublesome mycobacteria, the following brief information may be of help.

(1.) Until fairly recently, the diagnosis of tuberculosis was never questioned when acid-fast bacilli were demonstrated, by any method of examination, in the sputum or in gastric and bronchial aspirates. Now it is known that there are several groups of "so-called" atypical or unclassified acid-fast bacilli that may be found on such examinations, so it is necessary that tubercle bacilli be cultures before a definite diagnosis of tuberculosis can be made. This is the reason the State Laboratories are now making sputum cultures only.

(2.) Atypical acid-fast bacilli have been classified into four groups by Runyon on the basis of cultural and cytochemical characteristics:

Group I. Photochromogens (*M. kansasii*)

Group II. Scotochromogens

Group III. Battey bacilli

(non-photochromogens)

Group IV. Rapid growers, including  
*M. fortuitum*

Photochromogens, Battey bacilli and *M. fortui-*



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tum have been identified as pathogens producing disease that may be indistinguishable from tuberculosis. The Scotochromogens are believed to be generally saprophytic, although there have been reports of organisms isolated directly from diseased tissue. Some of the rapid growers are pathogens, most are saprophytic.

All of these organisms have their natural habitat in the environment, not in man or animals. There is no evidence that disease caused by them is communicable from man to man. All are generally resistant to the antituberculosis drugs.

(3.) Since it is now evident that at least some of these atypical acid-fast bacilli are widespread in some areas of Tennessee, but it is now not known how uniform this distribution may be, recommendations for sputum cultures are now being freely made on chest x-ray reports in order to help acquire this needed information. In this connection the following stated fact is significant: Acid-fast bacilli other than *M. tuberculosis* isolated in cultures from sputum or gastric specimens are without significance in human disease in the majority of instances.

(4.) The State Health Department Branch Laboratories, in addition to the Central Laboratory in Nashville, are now making preparations to culture all sputum specimens submitted to them. In addition, drug sensitivity tests for the three major antituberculosis drugs (isoniazid, streptomycin and PAS) are being done upon request. It is hoped that such tests will soon be made routinely on all sputum cultures processed in these Laboratories.

(5.) Effective now, the State Laboratories are reporting positive culture results in 3 weeks, or as soon as the culture becomes positive. No negative report will be made until at the end of the culture period, which is usually 6 to 8 weeks. This new procedure will eliminate the necessity of making corrected laboratory reports, as has been done in the past.

(6.) More detailed information concerning the classification and significance of these atypical mycobacteria, is set forth in a pamphlet prepared by the "American Thoracic Society" and published by the Department of Health, Education, and Welfare of the U. S. Public Health Service. This pamphlet can be obtained, upon request, from the State Division of Tuberculosis Control in Nashville, Tennessee.

R. H. HUTCHESON, M.D.

Commissioner

State Department of Public Health

February 16, 1966

## PERSONAL NEWS

**Dr. Joe F. Bryant**, Lebanon, has been selected Outstanding Young Man of Tennessee for 1965 by the Tennessee Jaycees.

**Dr. Geo. W. Holcomb, Jr.**, Nashville, announces removal of his office to 218 Twentieth Avenue, No. for the practice of pediatric surgery.

**Dr. Glenn F. Watts**, Knoxville, will be installed as a Fellow of the American College of Obstetricians and Gynecologists at its annual meeting in Chicago, May 2-5.

**Dr. George E. Cooper**, chairman of the department of radiology at the University of Tennessee College of Medicine, has been re-elected to the Board of Chancellors of the American College of Radiology.

**Dr. Richard O. Cannon**, Nashville, was principal speaker at the fourth annual Oak Ridge Hospital Trustee-Medical Staff dinner meeting on February 22nd.

**Dr. Charles H. Webb**, Tullahoma, and **Dr. W. Daniel Calhoun** of Manchester, have been elected to active membership in the American Academy of General Practice. The Academy requires its members to complete 150 hours of postgraduate medical study every three years.

**Dr. M. F. Langston**, Signal Mountain, was named "Big Boss of the Year" for 1965 by the Chattabwa Chapter of the American Business Women's Association. Dr. Langston received the award on February 1st at the Association's 11th annual Boss Night Banquet.

**Dr. George H. Finer** has been elected president of the Knoxville Society of Anesthesiologists, succeeding **Dr. Carl Nelson**. Secretary-Treasurer is **Dr. Richard F. Brailey**.

**Dr. Alden H. Gray**, Kenton, has been named outstanding citizen of the year by the local Junior Chamber of Commerce.

**Dr. Thomas F. Frist**, Nashville, director of the Middle Tennessee Heart Association, was guest speaker at the recent Lincoln County Heart Fund Raising Luncheon.

**Dr. Jerry F. Atkins**, Huntingdon, is the recipient of two honors from local civic clubs. The Junior Chamber of Commerce selected Dr. Atkins as Huntingdon's Outstanding Young Man of the Year, and the Jaycees Club chose him for their 1965 Distinguished Service Award.

**Dr. R. L. Wilson**, Henderson, addressed the local society of Medical Assistants in Jackson on February 8th. Dr. Wilson is president of the West Tennessee Heart Association.

**Dr. Clarence C. Woodcock, Jr.**, Nashville, and **Dr. Geo. D. Dodson, Jr.** of Jackson, have been elected members of the Board of Trustees of the Tennessee Hospital Service Association.

The Good Citizenship Award, given annually by the John Sevier Chapter of the Tennessee Society of Sons of the American Revolution, was presented this year to **Dr. William G. Stephenson** of Chattanooga.

Three Kingsport physicians, **Drs. J. Sam Brown, M. D. Hogan and Nathan A. Ridgeway**, participated in a discussion-type program entitled, "Hints for Understanding Young People—Let's Talk with the Doctors" on February 15th. The public was

invited to hear the discussions held in the auditorium of a local high school.

**Dr. W. Henry Lyons** has been elected Mayor of Rogersville.

**Dr. Garrison Geller**, chief of the intensive treatment unit and head of admissions at Eastern State Psychiatric Hospital, has been named superintendent of the Moccasin Bend Psychiatric Hospital.

## BOOK REVIEW

**Modern Treatment. A Bi-monthly Publication.**  
New York: Hoeber Medical Division of Harper and Row, Publishers, Annual Subscription \$16.00. Volume I, 1964.

No. 1, January: Treatment of Renal Disease, E. Lovell Becker; Treatment of Thyroid Disease, Edward A. Carr, Jr.

No. 2, March: Treatment of Pulmonary Diseases, Carl Muschenheim; Treatment of Liver Disease, Richard B. Caps.

No. 3, May: Treatment of The Anemias, Edwin D. Bayrd; Treatment of Cardiac Arrhythmias, J. Willis Hurst.

No. 4, July: Treatment of Infectious Diseases, Lowell A. Rantz.

No. 5, Sept.: Treatment of Epilepsy, Russell N. DeJong; Treatment of Arthritis, Carl M. Pearson.

No. 6, Nov.: Treatment of Headache, Arnold P. Friedman; Treatment of Acid Peptic Disease, Howard M. Spiro.

The first year of publication of this series on modern treatment has represented a large contribution to the current treatment of disease. The series of individual topics have been presented by outstanding authorities in their respective fields and leave very few questions unanswered as of the moment of their publication.

The format and planning of these volumes to be issued 6 times per year emphasize the need for recurring evaluation of treatment which is far from being static at this time in medical history. Many of the questions answered in these books cannot be found in the standard textbooks on medicine, merely because the usual form of textbooks is already partially outdated at the time of publication, insofar as current advances are concerned.

It seems to this reviewer that this series provides for the practitioner the means of remaining abreast of current therapy not met by other means.

**An Introduction to Electrocardiography. By Thomas M. Blake, M.D., University of Mississippi School of Medicine. 136 pages. Appleton-Century Crofts, New York. 1964. Price \$4.95.**

This book is well written and is especially designed for the medical student, intern, resident and the general practitioner. The book is easy to read and to understand. Fundamental concepts of electrocardiography are explained in a simple and

accurate manner. The book is not designed as a reference for electrocardiography, but answers many fundamental questions.

Included is a brief introduction to vectorcardiography. This book would also be excellent for a periodic review of electrocardiography. For good comprehension, reading time is between three to four hours.



JACK M. BATSON, M.D.

INTERNAL MEDICINE - GASTROENTEROLOGY  
413 MID-STATE MEDICAL CENTER 2010 CHURCH ST.  
NASHVILLE, TENNESSEE 37203

March 1, 1966

The Journal of Tennessee Medical Association

Dr. Rudolph H. Kampmeier, Editor

Vanderbilt University Hospital

Nashville, Tennessee

Dear Dr. Kampmeier:

There has been a lot of talk in the Tennessee Medical Association Journal, as well as the local Society, concerning the proposed \$15.00 a year increase in dues to the Tennessee Medical Association. Your Journal has contained exhortations to have this increase put through. Reasons have been given, such as, the greater need for funds to fight Government medicine, the increased cost of living, and the relatively higher dues for Medical Associations of the surrounding states. I believe that these arguments do not get to the facts of running the Tennessee Medical Association.

I believe that every doctor in the Tennessee Medical Association should know that the Association has a bank balance of \$57,000.00, on which they earned \$8,640.00 last year. I think the doctors should know that the deficit which has been budgeted is \$20,000.00 and that the increase in dues will amount to some \$43,500.00. I would like to know what the Tennessee Medical Association plans to do with this extra money. I think that every doctor should know that approximately 12% of the funds that go into the Tennessee Medical Association go for political purposes and to improve the doctor's public image. Furthermore, over 50% of the TMA budget goes to support its own home office and operation. This does not include moneys for the Journal or the delegates to the AMA or the Tennessee Medical Association meeting.

One of the arguments advanced is that the Tennessee Medical Association Journal, with its "good scientific material", is using money and it is quite valued by the physician. Nevertheless, by count, there were only 36 original articles in

the Journal last year and 6 of these were not related to medical subjects. This is an average of 2½ scientific articles per Journal. The Journal is budgeted to run a deficit of \$7,000.00 in the year of 1966. This works out to \$2.41 per paying physician in the Tennessee Medical Association. I feel that we should seriously question the worth of our Journal. Is it a sacred cow that should be supported no matter what the cost? I, for one, do not get this much value from the Journal.

Finally, it should not matter to us what our neighboring states spend on their Medical Association. The main point is that we get adequate value for the money we spend. I am certain that those who make a living by working for the Tennessee Medical Association will find some way to spend the increased income from the dues raise. This is their business. I believe the doctors of Tennessee should have more interest in the financial matters of the Tennessee Medical Association on a dollars and cents basis.

If you would like to consider this as a letter to the Editor and print it in the Journal, you have my permission. I trust that you will not use more than equal space in rebutting my letter. I have tried to be reasonable and unemotional in my criticisms and I trust that anything said against my feelings will be on the same level.

Sincerely yours,  
Jack M. Batson, M.D.  
JMB:mj

*Answer.* In a way it is unfortunate that the above letter arrived after the deadline for the March issue of the *Journal*, since it might have been of greater interest before the Annual Session of the House of Delegates of TMA.

With respect to the "sacred cow"—the *Journal*—it seems needless to recapitulate the "pros and cons" for a state journal, since these were quite thoroughly aired on the editorial page only several months ago (Nov., 1965). The "scientific" limits of the journal were well delineated and balanced against certain positive advantages of a state journal. I might add only a thought I have had for many years and which did not seem pertinent to that discussion. It seems probable to me that the circumstances in future years will force state journals to amalgamate into regional journals for reasons which I have presented to the officers of the TMA upon occasion, but the time is not ripe for this. Disadvantages of such a move would be quite similar to those which Dr. Batson, the writer of the above letter, might encounter if his family and the family on each side of his home collaborated in a common family car. All of us who patriotically shared cars because of gasoline rationing during the War heaved a sigh of relief when the time arrived when each could go his own way even if more costly!

The correspondent indicates that the need for increased expenditures by TMA in coming years are presented flimsily, saying that "these argu-

ments do not get to the facts of running the Tennessee Medical Association." Since the writer of the letter hopes that I "will not use more than equal space in rebutting (his) letter," I suggest to him and others that the several papers, as well as my introductory squib to this series of papers, which appear in this issue of the *Journal* be read thoroughly and reflectively. It somehow or other does not permeate the minds of many physicians that organized medicine has a quasi-official status recognized by local, state, and national government. To date and for more than a century the segments of our government have dealt with organized medicine as a means of solving problems of health and medical care, even after heated battles over ideology. Cooperation and compromise have been the characteristics of political science as applied in the United States. (There are European countries in which government has no organized medical opinion which may be sampled and in which medical practice is individually contractual with government.) The burdens which *Medicare* and subsequently Title 19 will place on the TMA office is no figment of the imagination. This is known from past experience with other and much smaller aspects of federalized medicine. (The President's page (Dec. 1964) briefly reviews the amazing expansion of TMA in 15 years under the pressure of present day circumstances.)

Relative to Dr. Batson's comments on finances, quite obviously some clarification is needed. In the first place, it is recognized by no lesser agency than the Internal Revenue Service that any membership association, irrespective of its kind, needs to have a *minimum* of one year's fluid reserves on hand to meet unforeseen exigencies, well illustrated by the remission of dues to those in the Armed Forces as between the years 1941-1946. The necessity for fluid reserves has been established by custom and experience for more than a generation. Quite obviously the \$8,640 referred to in Dr. Batson's letter as interest on the bank balance would be a remarkable 15% interest! This income of course refers to income from total reserves. The necessary cash on hand at the beginning of any year must be a minimum of \$60,000 to carry on the functions of the State Organization for the number of months early in the year, during which the dues dribble in from the members, to continue the running expenses of the headquarters. I do not believe it necessary to go into the financial balance sheet of TMA in detail. Rather I would refer Dr. Batson and others interested to page 181 of the June issue (1965) for this information. (A balance sheet will be published in the June issue of the *Journal* this year after actions of the House of Delegates are abstracted.)

As is common to all organizations of professional or personal interrelationships, the major source of income is through dues and a higher percentage of income is devoted to the activities of such an organization, whereas in a manufac-



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turing business the costs are balanced against the returns on invested monies. The writer of the above letter is not convinced that anticipated burdens on TMA by the federal programs will demand more attention by the staff of TMA (though we predict another person may need to be added to the staff), nor that inflation, which is met every day in the grocery store, is a reason for raising dues. Having already reached "deficit spending" (in terms of cutting into reserves) no far-seeing organization or business can afford to await the certainties of increased expenditures and then make the necessary moves to increase dues as through action of the House of Delegates.

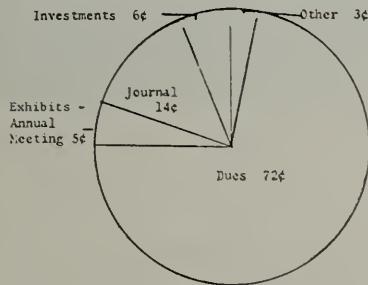
Because of certain misstatements as to the use or implied misuse of the membership's dues, I have asked the Executive Director to prepare the "dollar income" as well as the "dollar expense" as a visual aid to income and expenditures.

#### TENNESSEE MEDICAL ASSOCIATION

##### Distribution of the income dollar for 1965

###### INCOME

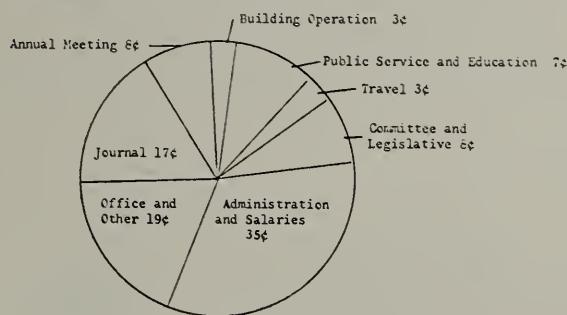
From each income dollar received in 1965, the chart reveals the amount and the source:



##### Distribution of the expense dollar for 1965

###### EXPENSES

For each dollar expended in 1965, the chart reveals the amount of distribution and the purpose for which it was spent:



I hope this will be helpful, along with the report of the Treasurer which will appear in the June issue, in clarifying doubts as to income and outgo. In looking at these figures it should be recalled that certain duties assigned to TMA by the state and federal governments, which are of a quasi-official nature, will require assembling of committees at Nashville, with attendant expense, to meet requirements set by law for the bodies of organized medicine. Dr. Jack Batson possibly, and other members certainly will turn

to TMA repeatedly for interpretation of various aspects of the upcoming laws.

Finally, if anyone is dissatisfied, he must hark back to the American bases of government—we abide by the decisions of the majority. By the same token everyone has the right to express opposition, a right recognized in the publication of the above letter.

Signed,

*Editor*

## ANNOUNCEMENTS

### Calendar of Meetings, 1966

#### State

- |             |   |
|-------------|---|
| May 19      | Middle Tennessee Medical Association, 143rd Semi-Annual Meeting, Shelbyville  |
| Sept. 26-27 | Tennessee Valley Medical Assembly, Tivoli Theater, Chattanooga  |
| Nov. 9-11   | Tennessee Academy of General Practice, 18th Annual Scientific Assembly and Congress of Delegates, Gatlinburg Auditorium, Gatlinburg |

#### National

- |               |   |
|---------------|---|
| May 1-5       | American College of Obstetricians and Gynecologists, Palmer House, Chicago                        |
| May 7-8       | American Academy of General Practice—State Officers Conference, Muehlebach Hotel, Kansas City     |
| May 9-13      | American Psychiatric Association, The Traymore, Atlantic City, New Jersey                         |
| May 22-25     | American Thoracic Society, Hilton Hotel, San Francisco  |
| May 22-26     | American Orthopaedic Association, Broadmoor Hotel, Colorado Springs, Colo.                        |
| May 26-28     | American Gastroenterological Association, Drake Hotel, Chicago                                    |
| May 30-June 1 | American Ophthalmological Society (members only), The Greenbrier, White Sulphur Springs, West Va. |
| May 30-June 2 | American Urological Association, Palmer House, Chicago  |
| June 2-4      | American Gynecological Society, The Homestead, Hot Springs, Va.                                   |
| June 13-15    | American Neurological Association, Sheraton-Park Hotel, Washington, D. C.                         |

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June 20-23	American Proctologic Society, Sheraton-Cleveland Hotel, Cleveland
June 23-27	American College of Chest Physicians, Sheraton-Chicago Hotel, Chicago
June 25-26	American Diabetes Association, LaSalle Hotel, Chicago
June 26-30	American Medical Association, Palmer House, Chicago
Sept. 8-10	American Association of Obstetricians and Gynecologists, The Homestead, Hot Springs, Va.
Sept. 16-24	American Society of Clinical Pathologists, Washington Hilton Hotel, Washington, D. C.
Sept. 17-23	College of American Pathologists, Washington Hilton Hotel, Washington, D. C.
Oct. 1-5	American Society of Anesthesiologists, Sheraton Hotel, Philadelphia
Oct. 2-8	American Society of Plastic and Reconstructive Surgeons, Inc., Flamingo Hotel, Las Vegas, Nev.
Oct. 10-14	American College of Surgeons, Fairmont Hotel, San Francisco
Oct. 10-13	American Academy of General Practice, War Memorial Auditorium, Boston
Oct. 15-16	American Association of Ophthalmology, Palmer House, Chicago
Oct. 22-27	American Academy of Pediatrics, Palmer House, Chicago
Oct. 23-26	American College of Gastroenterology, Bellevue-Stratford Hotel, Philadelphia

### Cardiology Nine Month Tutorial Program

A nine month tutorial program in cardiology, September 15, 1966 to June 15, 1967, will be of-

fered by the Institute for Cardiopulmonary Diseases, Scripps Clinic and Research Foundation, La Jolla, California. This will be an intensive academic effort covering the field of cardiovascular diseases and is especially designed for the physician, U.S.A. or abroad, who wants an intensive orientation in cardiology. The objective will be to offer training in the broad discipline of academic cardiology: the techniques of teaching, the use of the literature, the preparation of a Manuscript, the art of consultation, history taking, the methods of the specialty (auscultation, x-ray, fluoroscopy, electro and vectorcardiography, phonocardiography, cardiac catheterization, angiography, pulmonary function studies), the care and use of experimental animals, an introduction to biophysics and statistics, the selection and maintenance of equipment, maintenance of files and records. For information write: Executive Secretary, Institute for Cardio Pulmonary Diseases, Scripps Clinic and Research Foundation, La Jolla, California.

### Guides to the Evaluation of Permanent Impairment—The Respiratory System

This guide, like all the others in the series, has been designed primarily for use by physicians. It is, however, of interest and use to all concerned with the medical, administrative, or judicial aspects of programs for the disabled. The previously published guides in the series deal with the extremities and back; the visual system; the cardiovascular system; ear, nose, throat, and related structures; the central nervous system; the digestive system; and the peripheral spinal nerves.

This guide was published recently in JAMA.

A limited number of copies of this guide may be obtained, without charge, upon written request to the Committee on Rating of Mental and Physical Impairment, 535 North Dearborn Street, Chicago.



  
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# The Journal of the TENNESSEE MEDICAL ASSOCIATION

**Published Monthly**

**By Tennessee Medical Association**

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## Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville 12, Tennessee.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

DEVOTED TO THE INTERESTS OF THE MEDICAL PROFESSION OF TENNESSEE

R. H. KAMPMEIER, M.D., Editor

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# Journal of the Tennessee Medical Association

## OWNED AND PUBLISHED BY THE ASSOCIATION

VOLUME 59

MAY, 1966

No. 5

The author suggests that a recording of timed vital capacity offers a good index of assessing the patient's state during an asthmatic attack. Furthermore, it offers a tool in evaluating the efficacy of drug therapy.

## The Response of Acute Asthmatics To A Single Drug

LOUIS G. BRITT, M.D.,\* Memphis, Tennessee

### Introduction

In most acute asthmatic attacks, several agents and modes of management are used concomitantly. The psychic factor in this disease suggests that clinical impressions are difficult to quantitate and thus the severity of attack and response to treatment is haphazard and inaccurate. Because of these difficulties, a study was instituted comparing our clinical impression with quantitative determinations of impaired function. Hydroxyzine provides an ataractic, antispasmodic, antihistaminic, and antiserotonin effect.<sup>1</sup> Previous studies demonstrated excellent potentiating effects of hydroxyzine in combination with ephedrine and theophylline.<sup>2</sup> It was decided to use one agent to test both the accuracy of our clinical estimates as compared to a quantitative examination, and the efficacy of the drug.

### Methods of Study

The patients selected for this study were admitted to the Emergency Room with an acute asthmatic attack. A brief history and physical examination, including vital signs, examination of the chest, and a clinical estimate of the severity of attack was recorded. A timed vital capacity (1 sec.) was then recorded using a Vitalor.<sup>†</sup> The patients were given hydroxyzine, 50 to 100 mg. parenterally, according to their weight. A clinical assessment of their status, including pulse,

blood pressure, respiration, and general signs of improvement were recorded every 15 minutes for one hour. At the end of this time, the timed vital capacity was repeated.

### Material and Results

Sixty-one patients with typical history and physical findings of an acute asthmatic attack were studied. Records of timed vital capacity suitable for analysis were obtained in 40 patients. The remainder (21) were either unable to perform the test, because of extreme agitation and dyspnea, or could not produce a satisfactory record for technical reasons. The two groups afforded us an opportunity to assess our ability to evaluate the patients subjectively and objectively in an acute asthmatic attack and their response to hydroxyzine.

Table 1 compares our clinical impressions as to severity of the attack on admission with the clinical response of these patients one hour after treatment. Seventy-four per cent of the patients with mild or moderate attacks were classed as having excellent to fair relief. Fifty per cent of the patients, who were classed clinically as severe asthmatics had a good or fair response. The clinical response was excellent to fair in two-thirds of the patients, no matter what the severity of attack.

Table I

CLINICAL RESPONSE COMPARED WITH SEVERITY OF ATTACK (61 PATIENTS)

Clinical Response

Severity of Attack	Excellent	Good	Fair	Poor	Totals
Mild	3	11	2	1	17
Moderate	1	3	12	10	26
Severe	—	4	5	9	18
Totals	4	18	19	20	61

\*From the Department of Surgery, University of Tennessee College of Medicine, Memphis, Tennessee.

†Vitalor—The McKesson Vitalor. Hydroxyzine was kindly supplied as Vistaril by Mr. Jim Huddleston of the Charles Pfizer Company.

Thirty-two patients had an increased time vital capacity. Seventy-eight per cent of these had an excellent to fair result as determined clinically one hour after hydroxyzine was given. As would be expected the best response was recorded in the mild group. Considering that at least a 20% increase in timed vital capacity is significant, 64% of the patients were objectively improved (Fig. 1). This entire group of patients were judged clinically as improved (Table 2). The moderately severe group also demonstrated significant improvement in timed vital capacity in 64 per cent (Fig. 2). The clinical impressions recorded indicate that only 57% of this group showed improvement.

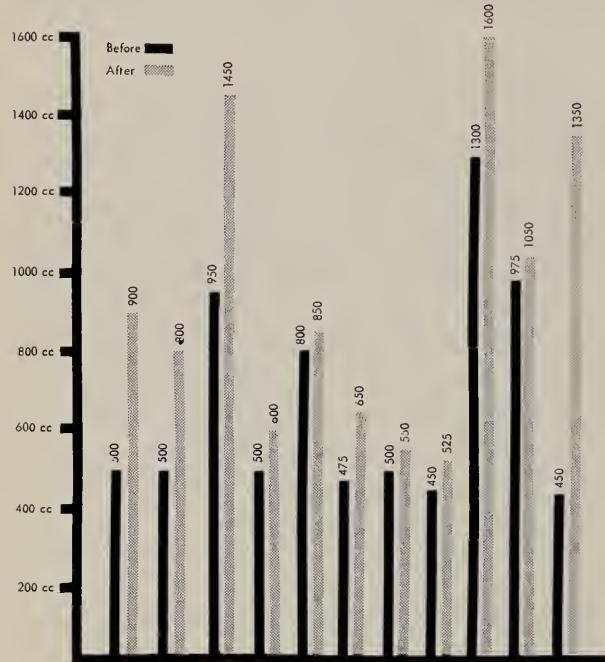


FIG. 1. Clinically mild asthmatic attack (one second vital capacity before and after Vistaril).

Table 2

CLINICAL RESPONSE IN 32 PATIENTS WITH INCREASED TIMED VITAL CAPACITY

Clinical Response

Severity of Attack	Excellent	Good	Fair	Poor	Totals
Mild	2	7	2	—	11
Moderate	—	2	6	6	14
Severe	—	2	4	1	7
Totals	2	11	12	7	32

The patients demonstrating a severe attack by clinical criteria showed good or fair results from treatment in 85 per cent. Timed vital capacity was increased significantly in 71% of these patients (Fig. 3).

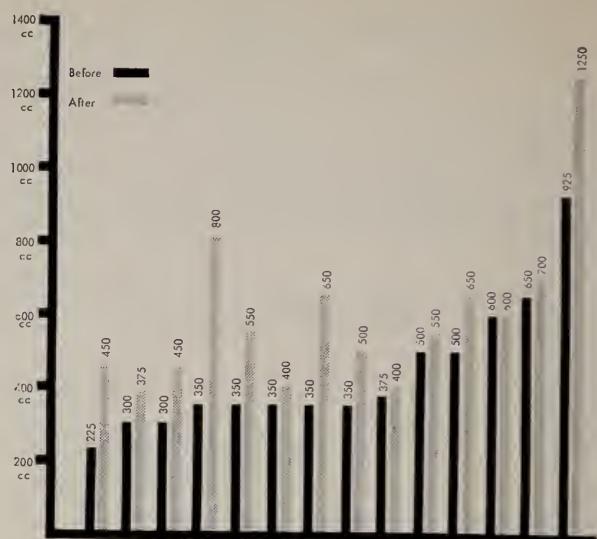


FIG. 2. Clinically moderate asthmatic attack (one second vital capacity before and after Vistaril).

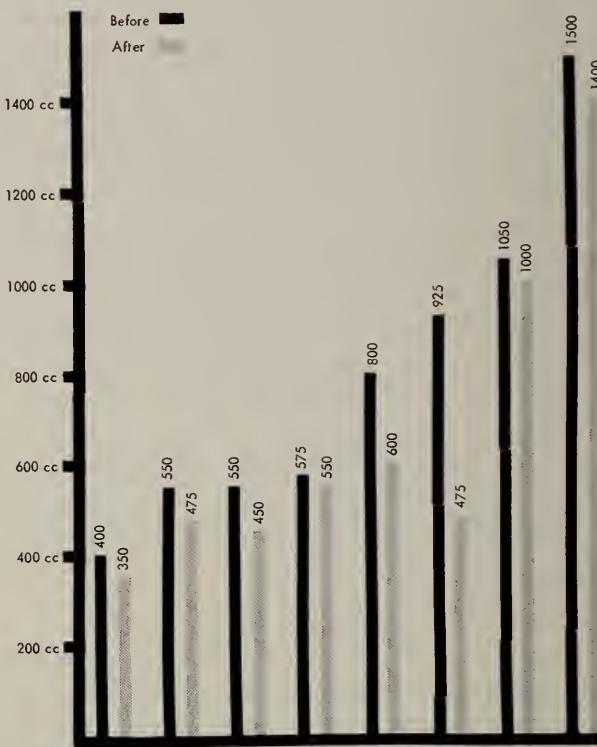


FIG. 3. Clinically severe asthmatic attack (one second vital capacity before and after Vistaril).

These data seem to indicate that satisfactory results can be obtained in all three groups of patients. In addition, there seems to be fairly good correlation between clinical estimates and quantitative measurements in the moderately severe and severe groups of patients.

A decreased timed vital capacity after hydroxyzine therapy was recorded in 8 patients (Fig. 4). The clinical impressions recorded in table 3 show a good or fair re-

sponse in 7 of these patients. None of the patients in this particular group were classed as severe asthmatics. We are unable to explain this decrease in timed vital capacity, since these patients responded clinically as well as any other group.

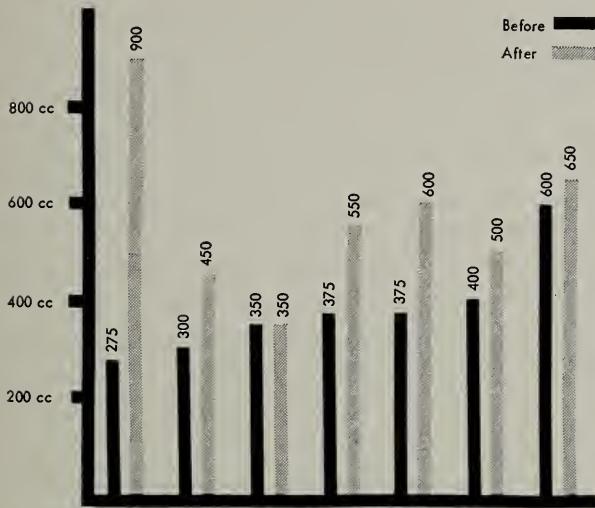


FIG. 3 Patients with asthmatic attack with decreased one second vital capacity.

Table 3  
CLINICAL RESPONSE IN 8 PATIENTS WITH DECREASED TIMED VITAL CAPACITY

Severity of Attack	Excel- lent	Clinical Response			Totals
		Good	Fair	Poor	
Mild	—	3	—	—	3
Moderate	—	—	4	1	5
Severe	—	—	—	—	—
Totals	—	3	4	1	8

Twenty-one asthmatics were evaluated on a clinical basis only due to their inability to perform the vital capacity test (Table 4). The severity of attack in these patients

Table 4  
ACUTE ASTHMA  
(No Vital Capacity—21 Patients)

Severity of Attack	Excel- lent	Clinical Response			Totals
		Good	Fair	Poor	
Mild	1	1	—	1	3
Moderate	1	1	2	3	7
Severe	—	2	1	8	11
Totals	2	4	3	12	21

is inferred by the fact that quantitative studies could not be carried out. Only 43% of these patients showed a good response to hydroxyzine at the end of one hour. These results imply that patients unable to perform a simple vital capacity test should be generally classified as severe asthmatics and that their response to therapy will be limited.

#### Summary

- (1) Two-thirds of the patients with an acute asthmatic attack respond clinically in a satisfactory fashion to hydroxyzine.
- (2) A significant increase in timed vital capacity can be demonstrated in 64% of patients with hydroxyzine parenterally.
- (3) An unexplained decrease in timed vital capacity in 8 patients does not correlate well with clinical impression of response to therapy.

(4) The use of timed vital capacity provides a semiquantitative method of assessing patients with acute asthmatic attacks and would seem to be useful in studying this disease and the effects of drugs.

#### References

1. Eisenberg, B. C.: Clin. Med. 7:275, 1960.
2. Kohn, C. M.: Am. Allergy. 20:252, 1962.

Much of reconstructive surgery upon the nose is made necessary by inadequate management of the original injury. The author considers the indications and treatment of the more common deformities.

## Complications of Nasal Fractures

JAMES B. COX, M.D., Knoxville, Tennessee

Because of its position and prominence on the face, the nose is highly susceptible to injury and as a result fractures of the nose are very common. The incidence of fractures of the nose is said to be higher than that of other fractures, except possibly those of the clavical and the wrist.<sup>1</sup> By virtue of the location of the nose these fractures may produce serious physiologic and esthetic abnormalities, and it is not surprising that complications resulting either from the primary injury or its inadequate treatment are likewise quite commonly seen. It has been estimated that as much as 30% of the corrective rhinoplasties done are necessary because of some inadequacy in the primary treatment.<sup>1</sup> Therefore, it seems warranted to discuss further the problem of complications of nasal fractures.

Most of the complications with which the specialist is concerned are related to residual structural abnormalities. These fall primarily into the general categories of:

(1) Deformities of the nasal bones and cartilage in which there is some degree of depression of the dorsum of the nose, caused by a frontal force.

(2) Deformities in which there is lateral deviation of the nose, caused by lateral force.

(3) Deformities in which there is a combination of depression and lateral deviation.

One can anticipate a comparable degree of associated septal deformity which may seriously affect the physiology of the nose because of chronic obstruction and possible infection in the nose and paranasal sinuses which may contribute to the external deformity.

Other complications which are occasionally seen are: (1) Associated soft tissue deformities such as scars, contractures of soft

tissue, or soft tissue losses. These may be prevented by appropriate care of the associated soft tissue injury. (2) Widening of the interorbital space due to fractures extending into the lacrimal bones and orbital plates of the ethmoid bones—this is best prevented by recognition at the time of the original injury, and adequate reduction and medial compression. Compression may be maintained if necessary, as in unstable comminuted fractures, by a horizontal mattress suture tied over small lead plates. (3) Injury to the nasolacrimal apparatus—this usually can be corrected by repairing the lacerated duct over a small polyethylene tube. The most important thing here is to recognize this injury when it occurs; treatment at the time is relatively simple. (4) Septal hematoma—this is no doubt quite common and may result in severe scarring and distortion of the septal cartilage similar in effect to the perichondritis of the external ear resulting in the cauliflower deformity. It is quite easily corrected by adequate evacuation of the hematoma and appropriate compression by nasal pack and splint after reduction of the fractures. (5) Septal abscess—this condition is much less frequently seen and fortunately so, as it may result in complete dissolution of the septal cartilage. It usually occurs in an unevacuated hematoma, and the proper treatment of the latter is the best method of prevention, along with general care appropriate to the situation. (6) Septal perforation—this may occasionally occur, because of severe concentrated trauma to the composite structure, though, it is often made more likely by hematoma and infection, or by over-zealous blunt manipulation at a point of displacement of the septal cartilage. Repair of a septal perforation, although usually difficult, may be accomplished by use of various local or regional flaps.<sup>2</sup> (7) Cerebrospinal fluid rhinorrhea—this condition may occur as a result of extension of the

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fractures through the cribriform plate and is more frequently seen in composite middle third facial fractures. Fortunately, this is usually temporary and ordinarily the meningeal tear will close spontaneously. In some cases this will not occur and repair of the fistula will be necessary. In the presence of cerebrospinal rhinorrhea reduction of the fractures should be delayed to permit an opportunity for spontaneous cessation and the patient should be on appropriate antibiotic medication to prevent meningeal infection.<sup>3</sup> (8) Meningitis—this is a rare complication and may or may not follow cerebrospinal fluid rhinorrhea.<sup>4</sup> (9) Aspiration of a bone fragment and subsequent lung abscess—another very rare complication, but one which is possible in any extensive, comminuted facial fractures.<sup>5</sup> (10) Delayed post-reduction hemorrhage—this will occasionally occur 7 to 10 days after injury and may sometimes be difficult to control.

#### Treatment of Recent Nasal Fractures

Adequate primary treatment of the recent nasal fracture and associated injuries is the best approach to the overall problem of complications. This is the opportunity for the physician to realize the maximal yield from his efforts.

Nasal fractures should be reduced as early as is reasonable, though when delay is necessary, because of associated injuries, reduction can be achieved with little difficulty within the first week after injury.

A good understanding of the basic anatomy and surgical pathology is important. The deformity varies with the mass and shape of the traumatizing object and with the force and site of the impact. With this in mind one can proceed to prompt and accurate diagnosis by careful inspection and palpation most often, though, lateral and Waters x-ray views can be most helpful and should be employed.

Anesthesia required varies with the deformity from none to oral endotracheal, but it is most important that it be adequate for the situation at hand. Sufficient hemostasis to permit careful and accurate reduction is necessary.

Treatment varies with the type of injury sustained. Unilateral or bilateral de-

sions may be easily reduced by inserting any one of several available and acceptable instruments under the fragments and lifting them back into anatomic position while molding them externally with the fingers of the free hand. The septum can then be manipulated into position if necessary. It is most important that adequate mobilization of the displaced fragments be accomplished. Then and only then can anatomic reduction be brought about. Judicious use of open reduction techniques may be necessary for impacted bone fragments or stubborn septal displacements.

Proper protection of soft tissues during manipulation is important and when reduction is accomplished, evacuation of hematomas should be done. When the displaced fragments have been restored to normal position, they are immobilized with nasal packing and external splinting. Packing should not be used as a method of reduction, but strictly as a method of internal splinting and compression to prevent recurrent displacement and postoperative bleeding and hematoma formation. Nasal packing is left in 3 to 4 days and the splint 7 to 10 days.

#### Treatment of Late Deformities

Nasal fractures which have not been adequately treated initially often result in a number of unpleasant deformities including varying degrees of depression and saddle nose, lateral deviations of the nose, and associated septal deformity which may cause not only difficulty in breathing but also sinusitis with all its symptoms. Treatment of these late deformities consists of septal reconstruction, which may include submucous resection and any one of several procedures which may be necessary to restore the septum to the midline and maintain it there, rhinoplasty for the deviated nose, and implants, usually bone or cartilage grafts, to elevate the dorsum of a depressed bridge or saddle nose. Various local cartilage flaps or grafts from the upper or lower lateral cartilages, or from the septum may be used in conjunction with usual rhinoplasty to correct less severe depressions.<sup>6,7</sup>

#### Summary

The more common complications of nasal fractures are related to residual structural

deformities in which the features of dorsal depression, lateral deviation, and septal abnormalities are predominant. A number of other complications may occur, though, they will be quite rare if appropriate preventive measures are taken. Early and adequate treatment of the nasal fractures will prevent a large percentage of complications. Reconstructive procedures can be used successfully to correct late deformities.

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#### Hermaphroditism

**DR. G. H. AIVAZIAN:** Today we will discuss a rare psychiatric problem characterized in this patient, a hermaphrodite, by a strong desire to approximate the female anatomic structures by surgical means, to be like other girls and to be socially accepted as a female.

**DR. KARL S. MIHALOVITS:** The patient to be presented today is a 19 year old white female, born a hermaphrodite, who was admitted to the OB-GYN Service for a vaginoplasty. Psychiatric consultation was requested to evaluate the patient's psychosexual orientation, self-concept and any psychiatric contraindication to proposed surgery. The operation was performed before this presentation but the case is presented in retrospect for evaluation and future reference.

The patient apparently had no difficulty until 1958 (at which time she was 12 years of age) when she fell off a truck receiving a concussion and scalp laceration. She was taken to a hospital where physical examination revealed the patient to be a hermaphrodite with male external genitalia. Patient apparently had no sequelae from head injury.

Physical examination revealed a normal left testicle in the inguinal canal, hypospadiac penis and no female internal pelvic organs. A bilateral orchiectomy was performed and patient was started on equine conjugated estrogens, which she has taken until the present time. Further surgical repair was not attempted at that time. The patient decided to have vaginoplasty in order to lead a female heterosexual life, as she is contemplating marriage. Intellectually she realizes and accepts that she will not be able to have children.

The patient was first seen in psychiatric consultation in September, 1965, by Dr. Hancock. Psychiatric consultation was recommended by The Division of Vocational Rehabilitation to determine if there was any psychiatric indication for rehabilitation, as there was no physical limitation of function. Dr. Hancock's evaluation showed that she had difficulty in calculation, immediate recall and abstract thinking as well as periods of depression which she described as "blue spells" caused by being isolated in rural area, but no other significant psychopathology.

We first saw the patient on Nov. 10, 1965 in consultation after she had been admitted to OB-GYN Service for vaginoplasty. Our evaluation

revealed neurotic traits, personality disorder and signs of organicity. However, we felt that the patient was quite well adjusted emotionally, had satisfactory and realistic self-concepts and found only minor evidence of psychosexual confusion. In conclusion, we thought that there was no contraindication to surgery for psychiatric reasons.

#### Social History

**Informant:** The 35 year old mother of the patient was well composed, dressed neatly, and seemed of average intelligence. The informant lives in Chicago with her husband and two younger children.

**Family Background and Personal History:** The patient is the oldest of the mother's four children. The patient was illegitimate. The putative father left the informant's home before knowing the informant was pregnant. The informant was married a few months after the patient's birth. There is one child of this marriage, an 18 year old son. The informant was divorced in 1948, and remarried in 1950, when the patient was 4. There are 2 children from this marriage, a son 14 and a daughter 12. The patient gets along well with her step-father. The patient has lived with her maternal grandparents since birth. The informant moved to Chicago in 1953; the patient preferred to remain with her grandparents. The mother and daughter have visited often.

The patient, at the age of 11, inquired about her real father and, according to her mother, was told the truth.

**Cultural and Economic Background:** The patient's grandparents are in their seventies. The grandfather has been retired because of poor eyesight since the age of 60; he had been a carpenter. The grandmother has never worked. The grandparents are not poor, but never had much in the way of material goods. The patient's mother is one of 9 children. One sister, widowed and divorced, age 45, lives in the grandparents' home, as does her 20 year old daughter with whom the patient shares a room. They are Baptist; not regular attenders, not "strict believers."

**Patient's Personal History:** The patient was a nine-months' baby. The informant was sick throughout her pregnancy, gaining 70 pounds. The informant had convulsions prior to and during delivery; a cesarean delivery was done. The mother also suffered from a kidney infection. The patient weighed 7 pounds and needed oxygen after delivery. The patient was considered a "normal baby" in all respects. She was a good eater, "spoiled" because of all the attention given her by her relatives. She was difficult to toilet train until 4 years of age.

**Medical History:** Patient had asthma as a young child but no other significant history until she received a concussion from a fall from a truck in 1957. She was hospitalized and for the first time there was consultation for the gynecologic problems. Her doctor explained that her organs were not developed fully and never would be,

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therefore, she would never have menstrual periods. He explained to the patient and the informant that an operation could be performed. Until the present time the patient would not agree to the operation.

**Childhood and Youth:** The patient was sheltered, protected, and pampered by her grandparents. The informant feels the patient is shy, easy-going and affectionate. The patient thinks of her mother as an older sister and confides freely with her. Following the patient's accident in 1957, she was able to remember little that she had learned in school. She stopped going to school in the seventh grade. She is still unable to spell, and her reading skills are quite limited. She moved to Chicago when 15 and her mother enrolled her in a clinic for exceptional children where she seemed "to learn by leaps and bounds." She returned to her grandparents and has worked as a waitress and dishwasher. She enjoys dancing and movies. The patient was afraid of the dark and of injections. She has always had friends, but still is somewhat shy; always felt inferior and has never been particular about her personal appearance. The patient has been dating for three years and is considering marriage. The patient apparently now has a good attitude regarding her operation, understands she will be able to have intercourse but no children. She has said she would adopt children.

### Psychological Report

This patient demonstrated an unusually high degree of motivation to comply with the examiner's requests. Her best efforts to accomplish this end were not successful. Throughout the evaluation she encountered very great difficulty in making free associations to the Rorschach and even greater difficulty in verbalizing them. She demonstrated a consistent habit of repeating herself verbatim in entire sentences. For example, "It looks like a butterfly, butterfly—it looks like a butterfly." The patient encountered difficulty in explaining herself and her responses, in justifying them and even questioned herself as to the accuracy of her perceptions.

One of the most outstanding facets of her personality is to be found in the pervasive dysphoria which permeates the record. Her general emotional tone, then, is not one of pleasant, accepting and egosyntonic feelings but contains much which is ego alien and disequilibrating.

There is a very notable deficiency in this girl's capacity to form symbols. Many aspects of her record are very suggestive of organic brain damage effects.

As to the question of psychosexual identification, it is possible to report a much more favorable situation. The girl appears very definitely to be identified as a female and to have little if any ambiguity in that sphere. She tends to draw conclusions about the sexuality of an individual on the basis of the most superficial and accidental characteristics. For example, the usu-

ally perceived human figures on Card III, she interprets as young girls for no other reason than the fact that they are holding bags and she is quite convinced that a boy would not be holding a bag. The reasoning behind her conclusions as to sexuality makes as much sense as to conclude that a particular organism is *Homo sapiens* because it is wearing a hat. One would easily expect a greater amount of confusion than she demonstrates on depth examination, given the physical situation in which she has found herself throughout her life.

In summary and conclusion, this is the psychologic examination of a young pseudohermaphrodite who seems to have primary identification as a female, who is functioning at a border-line level intellectually, who manifests marked difficulty in symbol formation and who has a very dysphoric view of reality. As to the problem of psychosexual confusion, in relation to the operation which is being contemplated, however, this examiner finds no reason to expect that the patient will encounter any difficulty in ego which she will not be able to handle well.

The patient was interviewed by Dr. Aivazian. She was cooperative and calm. Her answers and remarks were short but to the point, and reflected low average intelligence. Emotional responses were appropriate. Thought content was within normal limits. Excerpts from the interview:

The patient was brought for the interview on a stretcher. (The patient's comments are in quotations.) The questions are asked by Dr. Aivazian. Can you tell us why you came to the hospital? "To get that operation done." What will the operation do for you? "Well, I mean I'll be normal, normal." Normal? "Like any other female girl." When did you first wish to have this operation? "Well, I've always wanted it done." Always? "Well, when I had my first operation, I got scared, I was just twelve years old. I've always wanted it done." Tell us a little about yourself when you were a little girl. "You mean what I did? Well, I was pretty mean. I'd dress up and wear my mother's heels and stuff like any other little girl." How did your parents dress you? "Like a little girl." When was the first time you noticed something different about yourself? "I was pretty small, I thought that everybody was in my condition." When did you find out this wasn't so? "I couldn't tell you." At school? "I didn't pay no attention." How many years of schooling have you had? "I went through the eighth and I just quit. I didn't like the teachers, the pupils or school, period." What kind of grades did you make? "Not too bad, but they were pretty bad, but I like art." Who did you play with mostly? "With girls and boys. Well, I was a tomboy. I'd stay most of the time with the boys. I mean, I could climb a tree as good as my brother." Do you still like to be like a boy? "I grew older." When? "I'd say about fourteen." When did you have your first operation? "When I

was twelve years old." Did you know what they were planning for you? "The doctor talked to me and I misunderstood him or something. I was scared. What bothered me was I thought they were going to do this kind of operation on me but they didn't." How did you decide on this operation? "I was talking to this woman and she explained everything to me." Do you feel that you are like other girls? "No, that was one of the reasons I wanted to have that operation, so I could be something like other girls." Do you think you will have menstrual periods after this operation? "I don't think so." Now, tell me about some of your interests. "I like to work and that's about it." Do you like to date? "Yes." And dance? "Well, sometimes me and my sister, we try to do the 'jerk' and other kinds of dances." Do you prefer to dance with girls or boys? "With boys." How do boys like you? "Well, I ain't heard none of them say they didn't like me." That's very good. Do boys run after you? "No-oo! Oh, well, I don't know, I know quite a few boys." What do you want to be in the future? "Sometimes I'd like to get married and settle down." You said sometimes . . . "I get to thinking, just work and enjoy life." When did you know your mother? "I couldn't tell you." What do you call your mother? "I call her Mary." Is she like a mother to you? "She's like my sister to me." What do you call your grandfather? "I call him pop. I've always asked my mother about my father, you know, and she'd tell me that he got killed after I was born." What kind of a man was he? "I don't know." Tell me a little about your step-father. "Well, he works all the time. Him and my mother both, they work all the time." Is there any one person you like best? "Well, my grandmother and my grandfather, I care more about them than I do my mother, I mean I love her too. . . ." Could you describe the man you would like to marry? "Just as long as he's nice and everything and he treats me nice."

DR. AIVAZIAN: This patient presents two areas for exploration, the accident with head injury and its possible sequelae; and the problem of her physical abnormality which has been a source of concern to her, and she has been seeking help in order to find her identity as an individual. Dr. Mihalovits, how would you evaluate her case?

DR. MIHALOVITS: I can't see anything in this girl that seems to be abnormal except some questionable organicity that showed up in the psychologicals and Dr. Hancock's evaluation. The neurosurgeon did not recommend any follow-up studies regarding brain damage. They must have thought at the time that there was no sig-

nificant damage. I would recommend an EEG. I would say her I.Q. is low average, based on our evaluations. I wouldn't think it's primarily due to organic brain damage.

DR. JAMES C. HANCOCK: She is a waitress and I asked her questions about how you make change and she couldn't give me an intelligent answer. I would guess she does not make change or collect bills in the restaurant. Her memory for retaining orders was good to four digits. She was unable to remember a name and address. Later I saw her and I don't think she remembered seeing me previously.

DR. AIVAZIAN: She has, however been holding the same job as a waitress for almost three years.

DR. H. L. SMITH: This patient demonstrates a psychologic adjustment to functioning as a female. The psychiatric diagnosis which should be entertained is possible mental deficiency, mild, etiology unknown. The interview today does not demonstrate psychosis. It is fortunate that from birth the patient was reared as a female since the surgical procedure changed the external genitalia to that of a female. Some individuals develop severe psychologic disturbances as a result of psychosexual confusion and physical inadequacies. Findings should not over-ride morphologic considerations in sex determination. It is important that in the early days of life female hermaphroditism, associated with abnormal hyperplasia, be ruled out; since cortisone therapy may allow normal sexual maturation. From the information heard, I would agree that we are most likely dealing with a case of male pseudohermaphroditism. True hermaphroditism was not ruled out, however, since serial sectioning of the excised gonads was not done. Now that the surgical procedures have been carried out, the patient's present and future problem is adjustment to the increasing demands of heterosexual life and relationships as an adult female. To assist in this adjustment, psychiatric counseling is indicated.

DR. W. C. HIATT: It is a unique experience to discuss a case like this. The central theme is the question of psychosexual confusion, how it was modified and how in

some areas it was prevented. In her case we should consider the psychobiologic aspects of her sexuality. Let us consider this physical peculiarity which she seems to have noticed since going to school and perhaps sooner. She did not know her father. There was always a question of her legitimacy. Her mother seems never to have accepted that she has subnormal intelligence, which I assume was present before she received the blow on the head. I would suspect that the trauma to the head did no more than exaggerate the existing condition. Testosterone given the girl was stopped when she was 12 years old. Following this estrogen was given for 2 to 3 years. It is possible that we would have seen a different result had these hormones not been given. I feel we are also seeing renovating factors of cultural acceptance in view of the fact that this girl was reared and accepted as a girl in an accepting environment. I think we're seeing a personality within the broad limits of the average, and the prognosis for making a working adjustment seems to be fair.

DR. AIVAZIAN: How did it happen that this individual, born a hermaphrodite and who lived under adverse circumstances, from the very beginning identified with the feminine role?

DR. GILBERT KATZ: I think from the interview that she is feminine in every way. We are working, I believe, with a stable personality; a girl whose mother told her she was illegitimate and it didn't seem to upset her a great deal. She has assumed the feminine role as a waitress and dishwasher; she said she liked dancing, dating and is considering marriage. I would be interested to know her I.Q. She seems dull to some extent as far as her schoolwork is concerned prior to the accident, and remains so following the accident. One interesting thing she said was about premarital sex being like animals, being wrong, and she may have said this because her mother told her she was illegitimate. She may have a normal libidinal drive that's blocked to some extent by her physical limitations as well as her views on sex, but I think she has accepted herself as she is. I would imagine that dropping out of school might

possibly be related to the embarrassment of her physical condition.

MRS. BETTY RUTHERFORD (psychiatric social worker): She hasn't gotten herself into a real upheaval about her condition because she has learned to accept life. She isn't one of our little geniuses who worries about everything. I think if you grow up with brothers and in open places, you're more apt to be tomboyish until approximately 14 years of age. I think she's made a very good adjustment from the standpoint of a girl.

DR. JOHN McCUTCHEON: I think that the best help she can be given is with supportive psychotherapy as she begins to have less artificial block to libidinal drive and starts to think about marriage. She's got some rather practical problems to surmount in her personal relationships and I think if support with a therapist could be established now, this might assist her to successfully overcome the future trials which are probably going to be present and may allow her to become stronger and a better adjusted person.

DR. HANCOCK: I agree with everyone in respect to her psychosexual development and personality. The patient is female identified and female oriented with heterosexual libidinal drives. Everyone seems to have played down the organic findings and the depression that both the psychologicals and clinical findings have demonstrated. On clinical interview this girl puts up a pretty good front, but if you look behind some of this, you find out that she will answer questions superficially with yes or no. You ask, "Is everything alright?" She says, yes, but you go a little deeper and you find this is not so. She cries a good deal. She says she stays at home a lot by herself. She lives out in the country, gets blue and cries about it. She talks of having a pretty violent temper. Some of her symptoms are occasional frontal headaches and she has frequent dizzy spells. She sees herself as a very sensitive person. She doesn't like to see people get hurt. She has extreme difficulty in immediate recall. She had difficulty in handling calculations. Her handling of proverbs is rather concrete. She just doesn't seem to have much imagination.

On projective investigation she was asked what she would do with a million dollars, and she said she didn't know what she would do, she'd just put it in the bank. She also said that one of her secret wishes would be to live back in the wilderness and own a ranch and not be around anybody. I think we can look at some of the drawings she made for us and learn more about her inner self. Superficially, she perceives men and women but that's as far as she goes. She has difficulty in depicting human figures in detail. Her drawing of a person in the rain indicates she is hit pretty much by stress. One thing that struck me as symbolically significant is the pockets, in one drawing, fit anatomically the same place that the testes were removed when she was 12 years old. I agree that this girl has a heterosexual drive and little personality difficulty but I think she is impaired organically. The cause could be from birth trauma; it could be from the accident that she had. A basic medical tenet is that when a congenital defect occurs, other defects should be considered. In this case a CNS congenital defect might be present. Her most unpleasant concept is that of a coffin. That indicates presence of dysphoric elements. She could consciously accept that she would be unable to have children, but her dreams were centered around having children, not the actual birth, but the fact that she could be a mother. (Figs. 1 and 2.)

**DR. ALDO R. BEVILACQUA:** I'm glad to see that someone who has been through so many stressful situations was able to adapt psychologically. We could think about some things that happened to her at age 12 when she had the accident, and before her mother had the cesarean operation. She had some difficulty during birth but I didn't see any real difficulty in her personality development and I would probably discharge her and follow her for scientific interest without emphasizing psychiatric abnormalities.

**DR. AIVAZIAN:** She seems to have certain expectations, should we forget these and leave her on her own?

**DR. BEVILACQUA:** It seems that she is



FIG. 1. A person in the rain.

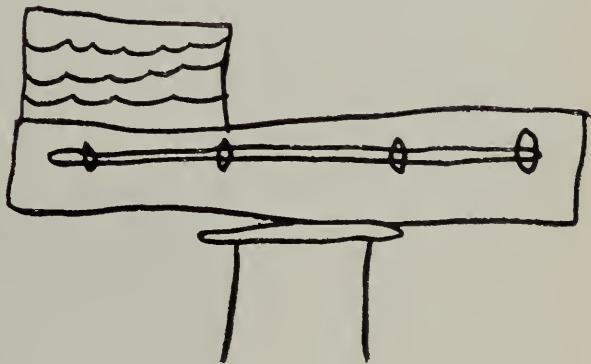


FIG. 2. A coffin.

aware of her limitations. She cannot have children. She has been dating and she states she enjoys this relationship.

**DR. MIHALOVITS:** She accepts this intellectually, but not emotionally.

**DR. AIVAZIAN:** She wanted surgery for a specific purpose and was told that she cannot have children. Does she not have other expectations from surgery?

**DR. BEVILACQUA:** To fulfill her role as a female.

**DR. AIVAZIAN:** If she fails in attaining her goal, is it not likely that she may be severely frustrated? She definitely needs help to understand and accept more realistically her limitations and potentialites as a

female. Where and what kind of help should be offered? Mrs. Chambers, may we have your opinion on this matter?

MRS. JEAN C. CHAMBERS (psychiatric social worker): I wonder if this, at least under ideal circumstances, shouldn't be left in the hands of the persons treating her for her physical condition, rather than in psychiatry. I feel that there are people who can be helped by a good many other modalities and I think this girl might be one example. It's quite remarkable that the experiences she has been through with physicians and others haven't produced more stress than evidently they have and I am very happy about that.

DR. AIVAZIAN: The case has been very well managed so far but there is definite need for follow-up. The consensus is that no psychopathology of serious importance was uncovered by clinical examination or by psychologic tests, and this individual, in spite of her physical make-up, has remained free of significant overlay of anxiety. She should remain in the care of her own doctors for follow-up. We still have to decide what recommendations to make.

DR. MARK IVIE: I think there's going to be a good deal more sexual threat to this girl than there has been in the past. In the past she could go out with boys and dance with limited physical contact. Now the possibility of intercourse exists. How is she going to adjust, accept or defend herself?

DR. AIVAZIAN: One of the things she pointed out was she would like to get married. How would you handle that?

DR. IVIE: What was her motive in telling us that she is engaged, and why did she protest that premarital sexual intercourse was a nasty, animalistic thing? I think the motive behind these remarks is an attempt to devalue and reject that which is not attainable.

DR. MIHALOVITS: Consider her relations with boys to the present. It has been stated that with artificial vaginas there is no sexual stimulation.

DR. AIVAZIAN: The patient surely expresses much "wishful thinking." She wants to be a girl, live like a girl and do

everything that girls do. This is very important for her. As always in wishful thinking, there is exaggeration and distortion of reality.

DR. HANCOCK: If I were to predict what would happen to her if she should have a psychiatric problem after surgery, I would predict that it would be depression. We know that in gynecologic operations, particularly mutilating procedures, about 40% of the patients do have some sort of psychiatric problems following operation, ranging from simple anxiety all the way to an acute psychotic reaction. In plastic surgery we know that the reparative and remolding techniques such as rebuilding the nose are often fraught with unsatisfactory results. I would like to see this girl followed from this aspect to see what does happen. I hope she will be quite happy with the results. I would also like to see the organic findings followed up to see if we can't find the etiology.

DR. DAVID F. MOORE: I wonder what will happen to this girl without support. Certainly she has had a certain amount of stability—but if she succeeds in marriage, or relations with men, then she may be threatened. I would recommend to the doctors working with her that if any depressive features show up or stressful situations appear, they provide outpatient psychotherapy. All she wishes for, according to her history, probably cannot be fulfilled. If she can be satisfied with companionship, then we must consider the possibility of whether her husband will be satisfied with the same situation. Now on this basis, I agree with Dr. Hancock; i.e., about proneness to depressive episodes. I think she will need supportive psychotherapy. I don't feel organicity is of major significance since she has functioned well for several years; however, I think she may be threatened in the future. If she thinks she is a complete female she will need some explanations to understand, since she will probably discuss these things with other women. For instance, why should she have to adopt children? Whether or not she is able to enjoy sexual relations, she should receive understanding and supportive therapy from the doctors. In

other words the stress which she may be exposed to, should be anticipated by her physician. If she can be prepared in this respect, then I would consider the prognosis fair. Whether or not she can accept love and companionship, we must consider the understanding of her husband. Will he be able to understand and accept the marital situation and support her, thus reducing the stress factor?

DR. AIVAZIAN: The biologic phenomenon of hermaphroditism, or bisexuality, presents interesting and challenging problems. This case brings into focus the significance of multiple etiologic factors, genetic, environmental and psychologic, which influence psychosexual development, role identification and social adjustment. Although from early childhood this patient wished to be a girl, until age 12 years she was a tomboy. The wishful thinking to be a girl established in her mind in early childhood was further reinforced by surgical removal of male sex organs, estrogen therapy, development of certain secondary female characteristics and further iden-

tification with girls during the sensitive years of early puberty. She seems to have escaped many of the commonly seen symptoms and personality traits in hermaphrodites, such as unhappiness, isolation, withdrawal, schizoid and inadequate personality traits, and acting out quite often in a homosexual sense. Satisfactory adjustment on the one hand and the absence of significant personality deficits on the other, suggest that the patient has a well integrated personality and a fair prognosis in respect to maintaining a workable social adjustment.

The patient unquestionably needs continued help at least for some time in order to help her cope with difficulties in adjusting to the "fuller female role" she expects to acquire following surgery and the disappointments in this respect that await her. She also needs help to find reasonable goals and a style of life within her reach. These therapeutic aims may be pursued by her treating physicians and with the co-operation of the psychiatric consultant.



11:47 pm

11:53 pm

12:06 am

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From the  
Executive  
Director

# IMMEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### The Meeting That Was!

- This was the Meeting that was! It was the 131st Annual Meeting of the Tennessee Medical Association at which:

Dr. G. Baker Hubbard, Jackson, assumed the presidency from Dr. John H. Burkhart of Knoxville.

Actions of the House of Delegates revealed the necessity of all members of the Association to take an active interest in the complexities of Medicare.

News of Annual Meeting activities was flashed across the State on radio and in the pages of newspapers.

Outstanding scientific papers were presented, resolutions were passed, awards were made, old friends renewed acquaintances and new friends were made, and your Association passed another era in its continuing march of progress.

Activities covered big and little events, many of which go to make up your Association's day by day activities. THE JUNE ISSUE OF THE JOURNAL WILL CONTAIN COMPLETE DETAILS AND REPORTS OF THE ANNUAL MEETING.

### Medicare Facts Of Life

● Physicians must learn all they can about Medicare because it will become a vital part of their daily lives. That is what Dr. James Z. Appel, AMA President, recently stated. The AMA President emphasized the importance of physicians working to make Medicare efficient in order to uphold the quality of medical care. He stated that Medicare should be recognized as a fact of life, but a program to watch closely in the months ahead.

● Physicians are warned against buying so-called "Medicare handbooks" now being offered in direct mail selling campaigns. Publications contain only basic information about the Law itself and will be worthless in preparing claims. Part I-B, regulations on supplementary medical insurance have not yet been issued and when available, distribution will be made to physicians.

● It is contemplated that each hospital in the State will be required to prepare a written description of its utilization review plan in order to be approved to receive Medicare payments. The establishing and the mechanism of utilization review is a responsibility of the hospital staff. Here are some of the items to consider in preparation:

- (1) The organization and composition of the committee.
- (2) The frequency with which the committee meets.
- (3) The type of records it should maintain.
- (4) The criteria used by the committee in selecting cases on a sample or other basis.
- (5) The committee's working definition of what constitutes a "period of extended duration".
- (6) The relationship of the utilization review plan to the claims administration by a third party.
- (7) The responsibilities of the hospital's administrative staff in relation to the performance of utilization reviews.

● Title XIX, often overlooked section of Medicare, merits physicians' attention. It provides for consolidation of

### Utilization Review

### Title XIX Program Important

## Hospitals and Medicare

all welfare health care programs into one state program. To participate in what is now called the medical assistance program (and thus qualify for matching funds), a state must show HEW how it plans to proceed toward the ultimate goal of full and comprehensive health care coverage for all Medicare indigent citizens. The states must make such coverage available by July 1, 1975.

- The Secretary of Health, Education and Welfare has announced the conditions for participation by hospitals under the Medicare program. These conditions are based on recommendations of the Health Insurance Benefits Advisory Committee - a sixteen member, non-federal group appointed by the President last year. The conditions for the most part were modeled after the requirements of the joint committee on accreditation of hospitals, and will permit a hospital accredited by the commission to qualify automatically for Medicare participation providing it has an arrangement for reviewing the use of its facilities.

The appropriate state agency may recommend that a hospital be declared eligible for participation if:

- (1) It is accredited by the joint commission and has, or will have, in effect by July 1, a utilization review plan; or
- (2) It is operated in accordance with the conditions of participation with no significant deficiencies; or
- (3) It is found to have deficiencies but is making reasonable plans and efforts to correct them and is rendering adequate care without hazard to the health and safety of patients.

- High on the Congressional agenda of the 89th Congress, is S. 2568, by Senator Hart, which forbids dispensing by physicians. This bill is very discriminatory. While the measure is aimed at some of the specialists, the measure also forbids any physician from realizing a profit in the dispensing of any drug or device to a patient. The bill only applies to medical practice.

In a recent trip to Washington by representatives of the Tennessee Medical Association, this bill was discussed at length with Senator Ross Bass. The Association clearly stated its opposition to this bill.

- Hospitals received a larger share of health-care spending---about thirty cents of every dollar. The total spent for hospital care in 1964 was 7.6 billion dollars. This compares with 7.8 billion dollars spent on tobacco products. Other portions of the health care dollar are divided among drugs - seventeen cents; dentists - ten cents; health insurance - seven cents; appliances - four cents; and miscellaneous expenses - five cents. The remaining twenty-seven cents goes to physicians. This percentage has declined slightly over the years. Twenty years ago, physicians received about twenty-eight cents of every dollar spent on health care. Expenditures for physicians services totaled 6.8 billion dollars in 1964, compared to 7 billion dollars spent on personal items such as cosmetics, hair cuts, and toiletries.

- June 26-30 are the dates of the AMA Annual Convention to be held in Chicago. The scientific program will be at McCormick Place, and the House of Delegates will convene at the Palmer House.

Six topics will be presented in the general scientific sessions at this year's annual convention including population expansion, emphysema, burns, mysterious fevers, community hospital coronary care units and headache. The general scientific meeting is open to all physicians attending the annual convention. In addition to the general sessions, each of twenty-three scientific sections will present scientific programs. Many of the section programs will, as in the past years, be joint meetings of two or more sections and, in some instances, a specialty society.

## Dispensing by Physicians

## Health Spending Increases

## AMA Annual Meeting in Chicago

# Public Service

THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

## Regional Medicare Conferences Set

- The Tennessee Medical Association will co-sponsor a series of four regional conferences on Medicare implementation with the Tennessee Hospital Association and the Tennessee Nursing Home Association.

Plans call for the meetings to be presented in Chattanooga at the Interstate Life and Accident Insurance Company auditorium on Wednesday, May 18; in Knoxville at the University of Tennessee Memorial Research Hospital auditorium on Thursday, May 19; in Nashville at Underwood Auditorium of the Vanderbilt University Law School on Wednesday, May 25; and in Memphis at the Tennessee Department of Public Health auditorium on Thursday, May 26.

A presentation on utilization committee concept, functions and operations will be made by Dr. Willard A. Wright of Williston, North Dakota in Chattanooga and Knoxville. Dr. Wright is a member of the AMA Council on Medical Service and is past chairman of the Council. The presentation on the same subject in Nashville and Memphis will be made by Mr. William H. Schofield, associate director of the Hospital Utilization Project, Pittsburgh, Pennsylvania. The project is co-sponsored by the Allegheny County Medical Society and the Western Pennsylvania Hospital Council and is nationally recognized for its work in this field.

Mr. Reyna Williamson, assistant regional representative for the Department of Health, Education and Welfare, Atlanta, Georgia will participate in all four conferences as will Mr. Richard E. Johnson, field director of Medicare administration for Equitable Life Assurance Society, the Part "B" insurance carrier for Tennessee.

The purpose of the meetings is to explain the portions of Medicare involving physicians the most — utilization and Part "B". Ample time for questions and answers has been arranged and each physician is urged to attend and become fully informed on these important phases of Medicare.

Two 2-hour question and answer periods will be allotted to each meeting. Participating on a panel to answer questions from those in attendance in addition to the above names will be Mr. Whalen Strobar, AMA Field Representative, and Mr. James H. Littlejohn, Director of Medicare Services, Tennessee Department of Public Health, as well as knowledgeable member physicians of TMA.

The complete program follows:

## 4 Medicare Regional Conferences

9:30 - 9:45 A.M. WELCOME: President of Local County Medical Society  
Representative of Tennessee Hospital Association  
Representative of Tennessee Nursing Home  
Association

PRESIDING: President of Local Medical Society

9:45 - 10:15 UTILIZATION COMMITTEE CONCEPT, FUNCTIONS AND OPERATIONS  
Chattanooga & Knoxville: Willard A. Wright, M.D., Member  
AMA Council on Medical Service  
Williston, North Dakota

Nashville & Memphis: William H. Schofield  
Associate Director  
Hospital Utilization Project  
Pittsburgh, Pennsylvania

10:15 - 10:45 UTILIZATION REGULATIONS AND REQUIREMENTS UNDER P. L. 89-97  
Reyna Williamson, Assistant Regional Representative  
Department of HEW, Atlanta, Georgia

10:45 - 11:00 COFFEE BREAK

11:00 - 11:30 PART "B" REGULATIONS UNDER P. L. 89-97  
Reyna Williamson, Assistant Regional Representative  
Department of HEW, Atlanta, Georgia

11:30 - 12:00 noon PART "B" CARRIER ADMINISTRATION AND OPERATION IN TENNESSEE  
Richard E. Johnson, Field Director, Medicare Administration  
Equitable Life Assurance Society, Nashville, Tenn.

12:00 - 1:30 P.M. ADJOURN FOR LUNCH

### AFTERNOON SESSION

1:30 - 2:30 QUESTION AND ANSWER PERIOD RELATIVE TO UTILIZATION  
Moderator: Ira M. Lane, Jr., Executive Director  
Tennessee Hospital Association, Nashville, Tenn.  
Panelists: Willard A. Wright, M.D.  
(Chattanooga & Knoxville)  
William H. Schofield (Nashville & Memphis)  
Reyna Williamson, HEW, Atlanta  
Representative Tennessee Department of Public  
Health  
Physician Representative from County Medical  
Society

2:30 - 2:45 COFFEE BREAK

2:45 - 3:45 QUESTION AND ANSWER PERIOD RELATIVE TO PART "B"  
Moderator: Jack E. Ballentine, Executive Director  
Tennessee Medical Association  
(Chattanooga and Nashville)  
L. Hadley Williams, Assistant Executive Director  
Tennessee Medical Association  
(Knoxville and Memphis)  
Panelists: Reyna Williamson, HEW, Atlanta  
Richard Johnson, Equitable Life Assurance  
Society  
Whalen Strobar, Field Representative, AMA,  
Chicago  
TMA Physician Representative

3:45 ADJOURN

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# OF CULTURES	YEAR	% EFFECTIVE
6,725	1962	88.6%
5,440	1963	88.0%
10,384	1964	88.5%

### *β-Hemolytic Streptococci* <sup>2,3,1</sup>

2,448	1962	89.5%
1,519	1963	95.2%
2,492	1964	96.7%

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## STAFF CONFERENCE

**University of Tennessee Memorial Research Center and Hospital,\* Knoxville, Tennessee**

### Boeck's Sarcoidosis With Multiple System Involvement

**DR. ROBERT W. NEWMAN:** We have a very interesting case to present. The patient was referred by Dr. John Crews of Oak Ridge, Tennessee, for diagnostic evaluation and treatment. We think that it presents many interesting pathologic entities combined in the disease-complex known as Boeck's sarcoidosis. Dr. Borthwick, surgical interne, participated in the work-up of this patient and will give us the clinical history and physical findings and some of the pertinent laboratory data.

**DR. RICHARD BORTHWICK:** This is a 50 year old lady who was admitted to the University Hospital because of a chief complaint of increasing dyspnea with orthopnea which had been present for a number of years.

Her past history revealed no allergy to any form of medication. The medical history was a little confusing because she had been examined and treated in various medical centers in the South and it was not clear whether she actually knew for what she had been treated. At the age of 21 she had an acute illness with swelling of the knees and ankles and at this time a diagnosis of rheumatic fever was made. She states that since then she has known that she has had a heart murmur. After she recovered from the acute phase she was not incapacitated. In the past 10 years she had pneumonia 5 times, the most recent in February, 1965. At this time she was told she had heart trouble and was given digitalis. However, when she was discharged from the hospital the digitalis was discontinued and she was told to take quinidine which she did for a short time and then stopped of her own initiative. She has been told for about 7 years that she occasionally has hypertension, and has taken various medications for this during this time. Also, in February 1965, she was told she had diabetes mellitus. Later she had a glucose tolerance test which did not show that she had diabetes mellitus. Her only surgical procedure was a tonsillectomy while she was small. She is still menstruating at the present time. She is married, gravida 13, para 5, with 8 miscarriages.

*Family history:* There is a background of heart trouble in the family. One brother died of a

heart attack and 3 other brothers have heart trouble. Her grandfather had chronic heart failure and she has a nephew who has heart trouble. Her mother died of cancer. The patient is a total abstainer from alcohol, but since the age of about 5 she has smoked cigarettes. She now smokes 20 a day and has done so for many years.

*Present history:* For many years she has been coughing and wheezing without any seasonal relationship. However, in the past 12 years she has become more short of breath, and at time of admission she becomes dyspneic on climbing one flight of stairs. In the past 5 to 6 years she has had several episodes of becoming dyspneic when lying in bed and has to get up and sit up, or stand up to relieve her dyspnea. She also says she has had intermittent dependent edema, and also edema of her hands and face, and this has required oral diuretics at times with good results. She has never had hemoptysis or chest pain and does not have a productive cough. At the time of admission she was not on any medication and had not been on medication for the past two months, although in the past year she has taken digitalis, quinidine and diuretics.

The physical examination revealed a 50 year old white woman, slightly overweight, but in no distress. She was alert and cooperative. The skin had good turgor and was not otherwise remarkable. The head, eyes, and fundoscopic examination were normal. She had a small 2 mm. long mass on the upper eyelid of the left eye just adjacent to the inner canthus. This was incidental, non-tender, but was seen by an ophthalmologist. Ears, mouth, teeth and throat and neck were not remarkable. The carotid pulses palpable and equal. The thyroid gland was enlarged to about twice normal size; mainly in the right lobe, and was irregular. Breasts were pendulous but negative. Rales were present in both lungs which cleared up on coughing. An expiratory wheeze was present in the right mid-lung field which did not clear when she coughed. Breath sounds were good throughout the lung fields. The heart had a rate of 84, with normal rhythm and without murmurs. Heart size could not be determined because of obesity. The abdominal and pelvic examinations were negative. There was no dependent edema nor lymphadenopathy. Neurologic examination was negative.

On admission the venous pressure was 120 mm. saline with 5 mm. excursion on inspiration; circulation time from antecubital fossa to tongue was 21 seconds. This was repeated later with circulation time of 19 seconds. The WBC. was 10,100 with 52% P.M.N., 4% Stabs, 38% Lymphs., 1% monocytes and 5% P.M.E. The Hgb. was 14 Gm. and RBC. 4.8 million. E.S.R. was 46 mm. per hour. Urinalysis revealed 10 to 12 WBC. and rare RBC., but was otherwise not remarkable. Blood VDRL was nonreactive. ASO titer was 50 Todd units, and a 2 hour post-prandial blood glucose was 88 Folin-Wu units. The PBI. was greater

\*From the Section of Thoracic Surgery in collaboration with the Departments of Medicine, Pathology and Radiology.

than 25 mcg.%, but this was thought to be an artificial elevation.

DR. NEWMAN: In the evaluation she had intradermal skin testing. These were negative to all strengths of the P.P.D. and to 1:100 old tuberculin. The chest films which were sent with the patient revealed marked changes in both lungs, particularly on the right side. Bronchoscopic findings were those of subacute bronchitis with some edema of the mucosa bilaterally, but no localized findings. She did have some evidence of either thickened pleura and/or fluid on the right side and two attempts at aspiration of the right pleural space were made but no fluid was obtained. A right scalene node biopsy was performed and actually was the procedure that established the diagnosis of Boeck's sarcoidosis. As Dr. Borthwick mentioned she had no palpable lymph nodes. She was extremely obese and as we frequently do for diagnostic purposes, this was a "blind" operation in an attempt to get some material that would help in the diagnosis in diffuse pulmonary disease. It is in Boeck's sarcoidosis that the so-called Daniel's scalene node biopsy is most helpful. We had some other x-ray studies which Dr. Tompkinson will comment on in a moment. In view of the diffuse nature of her pulmonary disease, Dr. Bradsher is going to comment about the findings and pathology from the clinical standpoint as relates to the Boeck's sarcoidosis involvement of the lung parenchyma. (Figs. 1 and 2.)

DR. JACOB BRADSHER: Boeck reported his cases of sarcoid in the *Journal of Cutaneous and Genito-Urinary Diseases* in 1899. For a long time this disease fell in the realm of the dermatologist, and it was not until the 1930's that it came to the attention of the chest men. In 1937, Dr. Max Pinner wrote an article published in the *American Review of Tuberculosis* describing Boeck's sarcoid involving the lung. We now know that Boeck's sarcoid involves the skin relatively infrequently. From 10 to 15% of the cases of Boeck's sarcoid have skin lesions. On the other hand, pulmonary changes are fairly characteristic. The number of the cases of Boeck's sarcoid having pulmonary lesions is estimated to be from 65 to 70%,

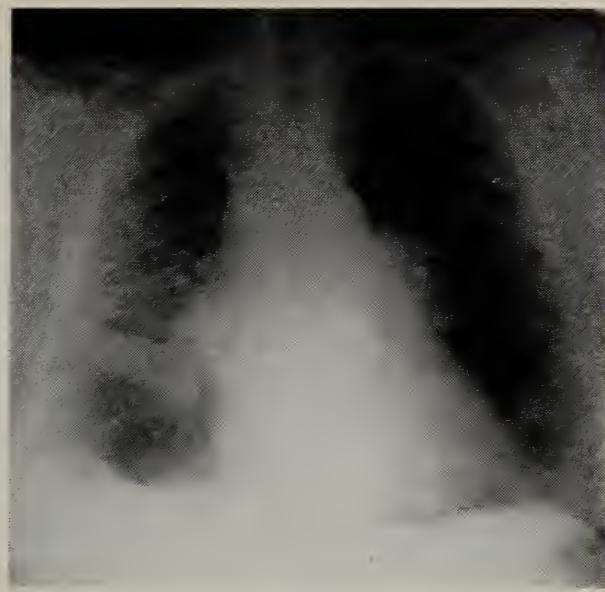


FIG. 1.

though it may not be exact because many pulmonary lesions are asymptomatic and x-ray films may not be made.

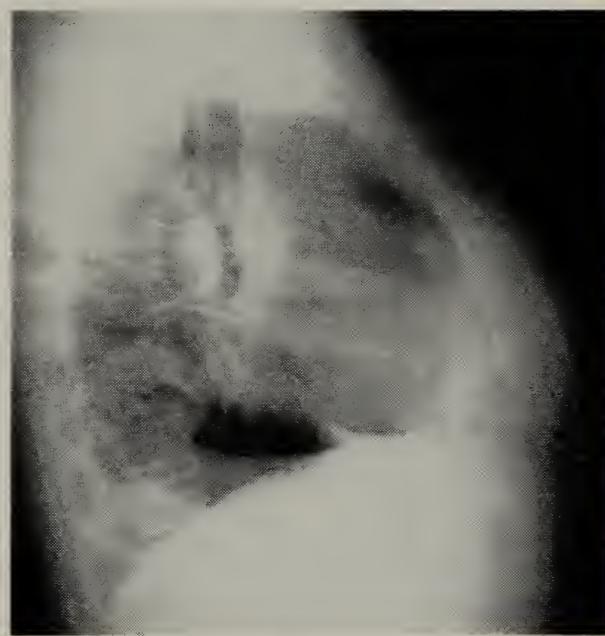


FIG. 2.

Unlike this particular patient who came with cough and shortness of breath, most patients we see in office practice are asymptomatic but with a report of an abnormal x-ray. Though there may be symptoms as in this patient of dyspnea, depending upon the degree of involvement of the lungs, the usual patient and certainly one with minimal involvement, has no symptoms other than possibly fatigue and weight loss. One is often amazed to see the patient and then

to see the x-rays of the chest; often on the basis of this one would expect more symptoms than are present. Usually Boeck's sarcoid produces x-ray changes in both lungs. The radiographic characteristics fall into 3 patterns of cases: One is involvement with large hilar nodes which is seen usually in the younger patients. Another and probably the most common form, is hilar involvement with diffuse parenchymal changes; these are either nodular or small densities scattered through both lungs in more or less symmetrical fashion. A less common form is that of diffuse changes throughout both lungs with little hilar lymph node involvement.

Endoscopic changes, it used to be thought, were insignificant. However, since middle 1940's there has been considerable interest in the endoscopic findings. Positive biopsies of the bronchial mucosa have been reported even though often the bronchial endoscopic findings were grossly negative. Our patient today had findings of diffuse bronchitis. Findings may be only some thickening in areas of the bronchial mucosa, though endobronchial sarcoidosis has been reported as cause for obstruction and atelectasis. Biopsies of the thickened areas and even of normal areas may be rewarding. As high as 50% positive biopsies have been reported in patients whose bronchosscopic findings were negligible. Biopsies show the typical changes of Boeck's sarcoid, collections of epitheloid cells and giant cells, and the granulomatous lesion without caseation.

Biopsy of the scalene nodes often confirms the diagnosis as in this case. Biopsies of muscle and of the liver may be helpful, though the needle biopsy may be difficult to differentiate from other liver diseases. A lymphnode biopsy is usually the most rewarding examination.

The Kveim test, an intradermal injection of saline suspension of ground up lymph node, spleen or other tissue of a patient with sarcoidosis, causes a reaction after varying lengths of time in patients with active sarcoidosis. A biopsy taken from this area shows the typical Boeck's-type reaction. Although it has been 80 to 90% reliable it is so prolonged that it is impractical

for ready diagnosis. Reactions have been as late as 5 years occurring after the injection.

The negative tuberculin test is characteristic of this disease, occurring in about 80% of the cases, in the remaining cases, if positive, it is usually weakly so.

Though many things have been proposed as a possible cause of the disease, this is still unknown. Sarcoidosis is most prevalent in the Southeastern part of the U. S., but it has been reported more recently in New England and North Central States. In Europe it is more common in the Northern portion. It is much more common among the Negroes than whites, with a ratio of about 18 or 22 to 1, and is more prevalent in the female than the male. Because of the geographic distribution of the disease, pine pollen and soil have been implicated as possible causes though not proven to the satisfaction of most observers. Because of pathologic similarity, it has been thought of as an unusual form of tuberculosis, though the clinical characteristics are unlike tuberculosis. The involvement of the eyes, heart, and parotid gland; and the absence of pleural involvement, and the x-ray characteristics are most unusual for tuberculosis. Patients who do develop tuberculosis frequently have been exposed to tuberculosis either in sanatoria or otherwise, and in recent years, during which exposure to tuberculosis has lessened, the late incidence of tuberculosis in Boeck's sarcoid has been infrequent.

DR. NEWMAN: After we had seen these x-ray studies and examined the patient to find that she had diffuse parenchymal disease and also probably some myocardial disease, arterial blood-gas studies were done. The pO<sub>2</sub> was 73.5 mm. Hg., pCO<sub>2</sub> 39.3 mm. Hg., pH 7.46, and percent oxygen saturation 94.9. As you see the pO<sub>2</sub> was moderately reduced. The normal here should be 95 to 100. The other two values were essentially within normal range. The comments by Dr. Obenour, who interpreted this data test was that of respiratory failure for oxygenation. A pulmonary ventilatory function test indicated restrictive lung disease. Dr. Rawson saw the patient in consultation because of the past history of

treatment for myocardial disease and will discuss this aspect of this lady's illness.

DR. FREEMAN RAWSON: This woman had enlargement of the cardiac shadow by x-ray and a history compatible with previous cardiac decompensation. Circulation time was found to be prolonged. The EKG. showed no specific abnormalities. Sarcoidosis may affect the heart in two ways. Probably the most common is development of cor pulmonale due to chronic pulmonary hypertension. It is easy to imagine how a patient with severe chronic pulmonary disease might eventually have severe pulmonary hypertension, right ventricular hypertrophy, and heart failure from this cause. Quite apart from this, autopsy studies have shown that 20% of persons with systemic sarcoidosis have myocardial implants. The pericardium may be involved as well, but apparently pericardial constriction is rare or unknown. Myocardial involvement tends to be more dense in the interventricular septum. The rest of the myocardium is usually involved, either sparsely or densely with the same microscopic features as the disease elsewhere. From a clinical point of view the myocardial involvement manifests itself in two different ways, the most common being rhythm and conduction disturbances. Approximately two-thirds of patients show either some form of A-V block, complete or incomplete, or bundle branch block; rhythm disturbances such as episodes of ventricular tachycardia are common. A large number die suddenly and death is usually completely unexpected. About one-third of patients who have myocardial involvement manifest this by chronic heart failure over a period of days, weeks, months, or years. It is usually fairly resistant to treatment and may be the cause of death in this group.

As far as management is concerned, a rhythm disturbance often, but not uniformly, responds to the drugs ordinarily used such as digitalis, quinidine or procaine amide. The individuals in failure will usually respond to some extent to conventional treatment. It has been suggested that prednisone is the treatment of choice when myocardial involvement is proven. Unfortunately there are only about 50 cases of

proved myocardial involvement available in the literature. Since there is no large accumulation of patients with myocardial disease who have been treated with prednisone we don't really know what the results would be. From the small number of patients who have been treated, it does appear that dramatic improvement with reversal of conduction defects, reversal of rhythm disturbances, and improvements in the heart failure at least fairly often occurs. At the present time this is probably the treatment of choice.

DR. NEWMAN: In the administration of steroids, Dr. Rawson, do you think it appropriate that this be covered with antituberculous drugs in view of the fact that the tuberculous organism has been incriminated as a possible etiologic agent?

DR. RAWSON: In the old days at least a quarter of these people eventually developed tuberculosis. I should think that isoniazide in prophylactic doses is indicated as you elected to do in this patient.

DR. NEWMAN: To continue the discussion, Dr. Tompkinson is here from the department of radiology and this patient presented in addition to her abnormal chest x-rays, some lesions of the small bones of her hands which are suggestive of the possible diagnosis of Boeck's sarcoidosis because a certain small percentage of patients with systemic Boeck's will have these small cystic bone lesions.

DR. ELSIE TOMPKINSON: This particular patient, to go back to what Dr. Bradsher covered, manifests both the hilar and parenchymal elements of the disease and I think for the benefit of the House Staff perhaps a word about the type of hilar adenopathy is in order, for to differentiate Boeck's from other things that cause adenopathy is not something the radiologist can do without further clinical information. There is something characteristic in most cases of Boeck's sarcoid that is helpful, namely that other than the bilateral nature of the hilar adenopathy, a large percentage of the cases have a parenchymal involvement on the right and this is very rarely found on the left. Also, in lymphomatous diseases which might give a similar hilar picture, involved nodes are very often

anterior, whereas in Boeck's one can see what we call the silhouette sign, not present here, meaning that the heart border and nodes are two at different levels and characteristically in Boeck's the nodes involved are the ones around the hilar roots, not being anterior, so this is somewhat helpful. Dr. Bradsher covered the parenchymal involvement and I'll just mention briefly what we use as a descriptive phrase for the reticular granular pattern is a ground glass pattern, much as you see in this patient, examining only the lower part where the soft breast shadow is overlying the chest. It does not hold for the upper lung field, so therefore is probably not a true ground glass appearance, but that is somewhat the picture we associate with ground glass reticular granular infiltrates. Very often parenchymal involvement can be manifested as a miliary nodular type of involvement, much as you see with miliary tuberculosis, with the nodules larger it is usually defined as nodular infiltrate. There is an interesting type where the nodules become larger and actually coalesce and give the cannonball lesion you see in metastatic disease, with sort of a fluffy appearance, not discrete. One large series of 250 cases were followed for some time and attempted to tie in the prognosis with the chest findings. The authors concluded that where hilar disease was present alone and regressed, the patient's prognosis was good. Where there was parenchymal involvement alone or with hilar adenopathy it might go on to the predominantly parenchymal fibrotic picture which is non-specific and one would not be able to diagnose Boeck's from other things causing fibrosis in the lung fields.

Before we go on to the skeletal changes, one should mention that about 10% of patients have documented Boeck's gastrointestinal involvement, usually limited to the stomach and to the proximal small bowel. These manifestations are not specific and can be anything from antral distortion, peptic ulcer disease, to linitis plastica of the antrum (rigid appearing) stomach. You might be surprised upon seeing a malignant appearing stomach and getting a scalene biop-

sy and find that this was Boeck's rather than carcinoma.

It should be noted that the skeletal changes are predominantly in the phalanges. Next in order of frequency would be the metacarpals and metatarsals, and the carpal and tarsal bones. Rarely other sites have been described such as the vertebra, and the ribs. The nonspecific findings that alert one's suspicion particularly in a patient that has had other things found is an osteoporosis which is not generalized but tends to be irregular in location, very often juxta-articular as you see in rheumatoid arthritis. However, this is not alone sufficient to say you have skeletal involvement. More characteristically there is distortion of the trabecular pattern, particularly in the middle phalanges of the fingers. These changes show radiolucencies within the medullary cavity which make the trabecular pattern stand out a little more definitely. As far as the more definite lesions that one sees in the skeletal system, and this patient has one, I am sure you can't see it, because I can't see it standing this close, and the punched-out lesions; perhaps the easiest thing to do is just to pass this film around. By holding it up I am sure you can see where the arrow is pointing. The punched out lesion is a little clear area which is located in the epiphyseal portion of the bone involved and differs from the rheumatoid changes seen in arthritis disease, in that there is cortex around this area. Many of the cystic areas in rheumatoid arthritis are subperiosteal where there is a notching effect of the involved area. Another type of lesion is really a further disturbance of the trabecular pattern, a honeycombed appearance or lattice work appearance in the involved phalanges where the trabeculae stand out and the supporting structure is almost gone. There can be coalescence of these two types of lesions so there is actually bone destruction and loss of bone substance with fragmentation of the involved bone. I should mention in closing, that in a patient with pleural effusion such as this patient has, and probably some parenchymal involvement, it is a little unusual to have pleural effusion since it is not characteristic of Boeck's sarcoid and when found makes

one stop to consider whether the diagnosis was wrong or whether there was some other system involved as reason for the pleural effusion. This particular parenchymal infiltrate, if indeed it is, with a narrowing of the fissure, suggests loss of lung volume. In Boeck's sarcoid the large lymph nodes do not seem usually to encroach upon the bronchial tree to a significant degree to cause atelectasis. Certainly this lateral film suggests loss of lung volume which is a little unusual.

DR. BRADSHER: Dr. Tompkinson, some cases have been reported of right middle lobe atelectasis due to large lymph nodes and compression of the bronchus. I believe Dr. Graham has reported such cases.

DR. TOMPKINSON: Yes, I know they have been reported but they are unusual. One thing about the hilar adenopathy, when calcification is seen it usually indicates there has been underlying granulomatous infection from some other cause that calcified because characteristically those of Boeck's do not calcify.

DR. NEWMAN: To continue the discussion, Dr. Jones is here to tell us the diagnostic characteristics of the findings as far as the gross and microscopic findings are concerned and also to tell us a bit about the pathologic changes one sees in the body organs in the various stages of the disease.

DR. FRANCIS S. JONES: The nodes received were not very large. None measured as much as a centimeter in its greatest diameter. I think you can see that this node is largely replaced by miliary granulomas. (Fig. 3.) The granuloma is composed of histiocytes (formerly called "epitheloid" cells) somewhat radially arranged around a central area which usually lacks necrosis. Occasionally one sees, as we have here, a little bit of fibrinoid material in the middle of the nodule. We stained slides for acid-fast bacilli and a prolonged search failed to reveal any acid fast bacilli and we also stained the material with Gomori's methenamine silver nitrate and these failed to reveal any fungus forms. So we are left then with a diagnosis of granulomatous lymphadenitis which has the features of Boeck's sarcoid. The histologic appearance of the lesion is much the same in all the or-

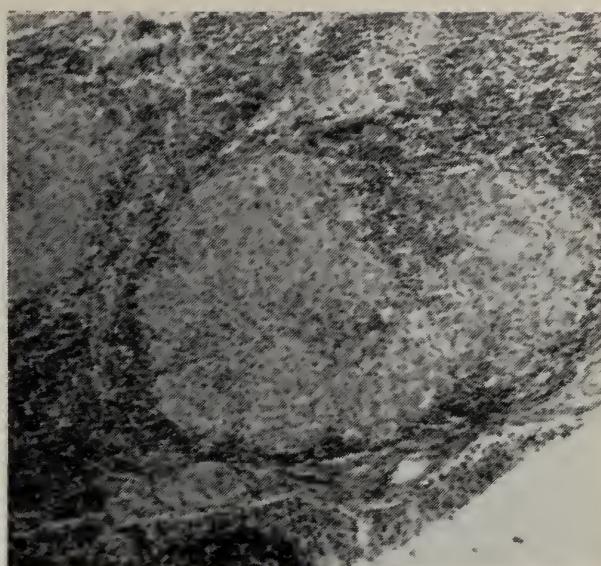


FIG. 3.

gans that one finds this lesion. The reason for the lack of calcification as Dr. Tompkinson mentioned, is the fact that we do not have large areas of necrosis as in tuberculosis. The healing, of course, is by fibrosis and hyalinization. I wonder, after Dr. Rawson's comments, if the myocardial healing doesn't result in myocardial scarring.

So in summary, the diagnosis of Boeck's sarcoid is essentially one of exclusion. Tuberculosis must be ruled out as well as fungus diseases producing a granulomatous lesion. I have always felt that the cases reported in the literature as Boeck's sarcoid terminating in tuberculosis were cases of tuberculosis from the onset and were mistakenly diagnosed as Boeck's sarcoid.

DR. NEWMAN: In summary, we have a disease of unknown etiology and I suppose at this point we should begin to discuss what happens to these patients. No one has a large series of cases so we need to go to the literature. Sones, in 1954, reported a series of 211 cases that had been followed for a period of 3 months to 20 years. He came up with the following results in proven cases of Boeck's: 35% recovered, 32% improved, 16% became worse, 10% died. So, you can see that approximately two-thirds of the patients are going to get well or going to improve, and the other third are probably going to have a steady downhill course. It has been mentioned that so many of these people in the past, when they came to autopsy, in addition to having Boeck's

sarcoidosis, also had associated tuberculosis. Whether this is cause and effect, or more likely the association with economic circumstances and the poor general health of these people which made them susceptible to tuberculosis. In all probability the latter association is the case.

Perhaps there are some questions. We have a minute or two remaining if a member of the audience would like to ask a question of a member of the panel.

Question from the audience: Were these statistics you gave with steroids, without, or what?

DR. NEWMAN: This was reported in 1954 and steroids were not used as much then as they are now, so I would assume not, and certainly cases diagnosed 20 years prior had not received steroids, but perhaps some cases in the more recent years had been treated. I would suspect this is a retrospective study in which they were trying to find out actually what happened to these people over the long haul. In this series steroids were not mentioned.

Question from the audience: Do these patients have bone symptoms?

DR. NEWMAN: Well, in the history of this patient, if you will recall what Dr. Borthwick said, she had some form of arthritis or rheumatic fever, or something wrong with her joints, so presumably she did have symptoms. But, did she have Boeck's sarcoidosis 20 years ago? I don't

know. Do you know if they have symptoms?

Answer from audience: Skeletal lesions are usually asymptomatic except those which have been picked up as vertebral lesions.

Question from audience: Dr. Newman, you don't recommend use of steroids on all patients, do you?

DR. NEWMAN: In the cases of Boeck's sarcoidosis that I have seen, we have not always used steroids. The reason for using steroids here is that, as Dr. Rawson pointed out, the sometimes rapid onset of fibrillation or some sort of arrhythmia which terminates fatally in these people with myocardial involvement and for that reason we are giving steroids to her. Occasionally these people have uveitis. We had this patient seen by Dr. Walter Benedict, ophthalmologist. She did not have uveitis. Sometimes the patients will have involvement of the uveal tract, lacrimal gland, and parotid gland, and these seem to be the chief focus in some people. Some elderly people will come in with the complaint of slowly going blind. The ophthalmologists can diagnosis this and they do treat these patients with ATCH or Cortisone, and with remarkable results. This lady did have a hard lesion just at the inner canthus of the right eye which may have been an involvement of the lacrimal gland. Dr. Benedict thought that it might be a manifestation of involvement in this area with a Boeck's lesion.



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# President's Page

## IN APPRECIATION



DR. HUBBARD

Humbly, I accept the presidency of this outstanding organization. Knowing that no one is adequate, I hope that my inadequacies will be tolerated and you will help me in our combined effort.

Our headquarters staff is headed by men who are not only capable of running their respective offices, but are devoted to the service of TMA. They cannot be sufficiently remunerated financially to pay them for the amount of effort that they make; only through the success of TMA are they adequately repaid for their personal activities.

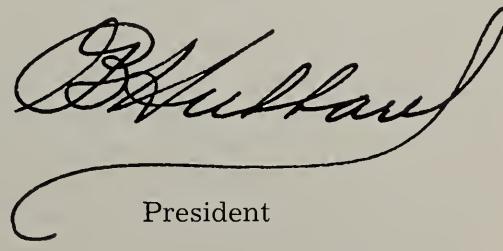
The Presidents who have served TMA before me have set an example that will be hard to equal. If you will think with me of our outstanding past Presidents, you will see why I enter this job humbly.

To all of the members of our efficient official family, and I am referring to our outstanding representatives, to the American Medical Association, to our Board of Trustees, our Council, all our Committee Chairmen and their members, and to the House of Delegates: Thank you for running this Society and giving of your valuable time for others. Your compensation comes only by your personal gratification in helping others.

We could not maintain TMA Headquarters if we did not have the officers and committees of the state component societies. They are the so-called grass roots of organized medicine. They are the ones who furnish us with the thinking of the individual practitioner, who after all is the one we want to represent. To you practitioners, please give us the value of your thinking that we so badly need. We would like your individual opinions and thoughts. May I solicit your help this coming year?

The Tennessee Medical Association Headquarters is planned to serve you. Mr. Jack Ballentine and his staff are not only knowledgeable but they have material that they can give you on any related medical subject and if they do not have it, we can probably get it for you. The subjects foremost now, of course, are related to socio-economic portions of medicine, including Title XVIII, Title XIX of Medicare, review committees, heart, cancer and stroke, ethics and professionalism and many others. If you desire a speaker for an occasion in addition to material, we probably can provide a well-informed speaker on almost any needed subject. If you do not ask, then we do not know your needs.

This year that I am President, we are going to have a motto of one word, Service. Please call on us for it.

  
A large, flowing cursive signature of "B. Hubbard". A decorative flourish extends from the bottom right of the signature under the name.

President

# THE JOURNAL

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MAY, 1966

# EDITORIAL

## CLINICAL USE OF CORTICOSTEROIDS

A sufficient time has now elapsed to evaluate the clinical aspects of adrenal steroid therapy and it is fortunate indeed, that one of the pioneers of such treatment, George Thorn,<sup>1</sup> has presented his ideas on this subject in a recent issue of the *New England Journal of Medicine*.

There are, at least, three systems in the chain of events that normally regulate pituitary-adrenal function. The first concerns itself with the release from the hypothalamic centers of corticoreleasing factor which stimulates the secretion and release of adrenocorticotropin by responsive anterior pituitary cells. It appears that these hypothalamic centers are suppressed by high levels of circulating steroids, possibly being responsible for the inhibition induced by long-term, large-dosage steroid therapy.

The intermediate link in this integrated system is the secretion of ACTH by anterior pituitary cells responding to the release

of corticoreleasing factor. A lowering of plasma-corticoid level is thought to provide the stimulus for increased corticoreleasing factor release, whereas a high, sustained steroid level inhibits its secretion. Two modifications of this simplified scheme must be acknowledged. In the first place, there appears to be an inherent rhythmicity in the release of ACTH which persists despite the maintenance of a constant plasma-corticoid level. This accounts for high ACTH and steroid values in the early morning hours and a gradual decrease during the latter part of the day. Secondarily, under circumstances of severe stress, such as occurs with surgery or burns, products released from tissue breakdown appear to be able to stimulate the release of ACTH directly, thus bypassing the hypothalamic-pituitary link.

The final link is the adrenal gland which when stimulated by ACTH increases the synthesis of four categories of steroid substances, glucocorticoids, mineralocorticoids, androgens and estrogens.

Before instituting long-term, high-dosage therapy with steroids, the levels of endogenous adrenal-steroid function should be measured. Patients with spontaneous adrenocortical hypofunction are predisposed to such disorders as asthma, severe allergic reactions and intestinal difficulties for which steroids are often administered. Such patients may need only physiologic rather than pharmacologic doses as replacement therapy and total withdrawal of therapy may never be justified. On the other hand, if pre-treatment steroid levels are present, large pharmacologic doses may be necessary to achieve the desired results and future withdrawal of the steroids will probably be necessary.

Unless the disease process is life-threatening, restraint should be exercised by the physician, despite patient prodding, before instituting long-term, high-dosage therapy. To be avoided is the use of cortisone for early rheumatoid arthritis before a coordinated program of rest, physical therapy and simpler therapeutic agents are employed. Also caution must be exercised in starting treatment if it is expected that long-term, high-dosage therapy is anticipated

unless the seriousness of the underlying disease justifies such action.

There are, of course, certain patients predisposed to additional hazards from steroids. These are persons with diabetes mellitus or a family history of this disorder, osteoporosis, peptic ulcer, gastritis or esophagitis, tuberculosis, hypertension and cardiovascular disease and psychological difficulties. Careful evaluation of the history of the patient being considered for steroid therapy, therefore, is mandatory.

Once it is decided to initiate therapy, the choice of ACTH or adrenal steroid must be made. Next, the possibility of utilizing an "alternate day" schedule must be considered. Hartner et al<sup>2</sup> studied patients with severe, intractable, chronic asthma who were receiving long-term steroid therapy as a life saving measure. He demonstrated that these patients could be maintained on twice the daily steroid dose given as a single dose every other day. On such a schedule the hypothalamic-pituitary-adrenal reserve function is much better maintained. Furthermore, there is a suggestive evidence that the undesirable effects of long-term, high-dosage steroids on supporting tissues such as bone, skin and connective tissue are appreciably mitigated.

Certain adjuvants designed to minimize undesirable side effects of prolonged steroid therapy are as follows: provision of supplementary potassium; restriction of sodium intake; protection of the upper gastrointestinal tract; minimization of osteoporotic changes; and amelioration of the diabetogenic action of steroids.

Finally, in selected individuals, repeated attempts should be made to reduce the maintenance dose of steroids or effect their complete withdrawal in an appropriate manner.

It is refreshing to have such a summary appear under the authorship of George Thorn. Adherence to his criteria for selection of cases and attention to his admonitions will provide our patients greater benefit and fewer risks when it is necessary to employ corticosteroids in long-term, high-dosage form for therapy.

A.B.S.

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- Thorn, George W.: Clinical Considerations in

the Use of Corticosteroids, *N. Eng. J. of Med.* 274: 775-781, 1966.

2. Hartner, J. G., Reddy, W. J., and Thorn, G. W.: Studies of Intermittent Corticosteroid Dosage Regimen, *N. Eng. J. of Med.* 269:591-596, 1963.

## DEATHS

**Dr. Joseph Tyree Gordon, Sr.**, 53, died March 19th at his home in Lewisburg from a heart attack.

**Dr. C. Brickey LeQuire**, 58, Maryville, former chief of staff at Blount Memorial Hospital, died March 6th at Vanderbilt University Hospital in Nashville.

**Dr. Herschel Penn**, 59, Knoxville, died March 19th in a local hospital.

**Dr. George Conner Lyons**, 77, Surgoinsville, died March 21st at Holston Valley Community Hospital in Kingsport following an illness of several months.

**Dr. W. F. Kimmell**, 51, Memphis, died February 22nd.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

#### Roane-Anderson County Medical Society

Dr. Thomas Cardillo, Cardiologist, Director NASA Division of Occupational Medicine, George Marshall Space Flight Center, Huntsville, Alabama, was guest speaker at the dinner meeting of the Society on March 29th. His presentation was entitled "ECG Response to Work Stress and Responsibility." Dr. David Stoddard, Director of Division of Occupational Medicine at NASA headquarters in Washington, D. C. was also a guest at the meeting, which was held in the dining room of the Oak Ridge Hospital.

#### Memphis-Shelby County Medical Society

The Society met in regular session in the auditorium of the Institute of Pathology on April 6th. The scientific program, entitled "Skin Cancer and Cutaneous Manifestations of Internal Cancer" was presented by Dr. Richard Henry Jesse, Associate Surgeon, The University of Texas, M. D. Anderson Hospital and Tumor Institute.

Following a session of the House of Delegates at 8:00 P.M., the Society's delegation to the Tennessee Medical Association held a caucus to discuss matters to be presented in



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the Association's House of Delegates, April 17-19, in Gatlinburg.

### Nashville Academy of Medicine Davidson County Medical Society

Dr. William Frye, Chancellor of the Louisiana State University Medical Center, discussed "International Medical Education" in the light of a far-reaching study nearing completion, at the meeting of the Academy on May 10th. The meeting, held in the auditorium of the Veterans Administration Hospital, was preceded with a dinner and business session of the Academy members.

### Chattanooga-Hamilton County Medical Society

A symposium on Medicare, moderated by Dr. Edward G. Johnson, was presented at the meeting of the Society on May 3rd. Panelists included: Mr. Harold L. Peterson, Administrator, Erlanger Hospital; Mr. Hadley Williams, Public Service Director, Tennessee Medical Association; Mr. James M. Waters, Tennessee Hospital Service Association; and Mr. W. V. Miller, Social Security Administration. The program was designed to bring up-to-date information to members of the Society on Public Law 89-97.

### Knoxville Academy of Medicine

The scientific program entitled "Cardiac Intensive Care Units" was presented by Dr. Freeman L. Rawson at the meeting of the Knoxville Academy of Medicine on April 12th. A special meeting of the delegates and alternate delegates to the Tennessee Medical Association immediately followed the regular Academy meeting.

## NATIONAL NEWS

### The Month in Washington

(From the Washington Office, AMA)

The Johnson administration wishes to prohibit manufacturers from mailing physicians free prescription drug samples except when specifically requested. The administration also has proposed that "door-to-door" distribution of samples of over-the-

counter drugs also would be banned. The proposals are included in new drug legislation that would expand the authority and responsibilities of the Food and Drug Administration in policing drugs. The legislation would have Congress find that:

"(1) the mass of unsolicited samples of prescription drugs supplied to licensed practitioners by manufacturers and distributors through the mails and otherwise has led to large-scale discarding and other disposal of unwanted samples which are finding their way into the hands of persons who scavenge and repack such drugs and sell them to pharmacists for dispensing on prescription in the same manner as regular stock of drugs; (2) children have obtained carelessly discarded samples; (3) the dispensing or sale of a prescription drug sample to a patient for a fee without identification of the drug as a sample is a deceptive practice; and (4) the unsolicited distribution of nonprescription sample drugs directly to householders lacks minimum safeguards which would be involved in the sale of the drug in a pharmacy or other place of business. Labels would have to read: SAMPLE DRUG. FEDERAL LAW PROHIBITS ANY CHARGE OR FEE FOR THIS DRUG."

Under the legislation, the FDA would be authorized to require records and reports of adverse reactions and efficacy on all drugs now being marketed. Dr. James L. Goddard, Food and Drug Administration commissioner, already had ordered a review of drugs cleared before 1962.

Another provision of the legislation would "require certification of all drugs whose potency and purity can mean life or death to a patient," thus extending the law which now applies to insulin and antibiotics.

The Pharmaceutical Manufacturers Association expressed doubt that the FDA could carry out such an additional responsibility. PMA president, C. Joseph Stetler, said it seems "unwise to propose new areas of responsibility for an agency which has not yet proven its ability to administer" its present programs. Stetler added: "The industry has said before that no amount of labeling can protect an individual who refuses

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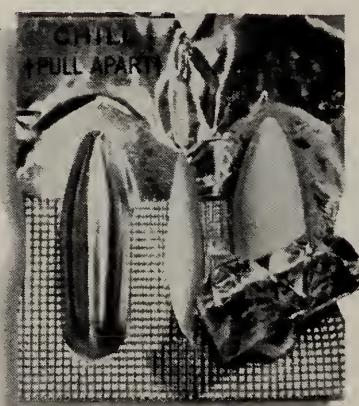
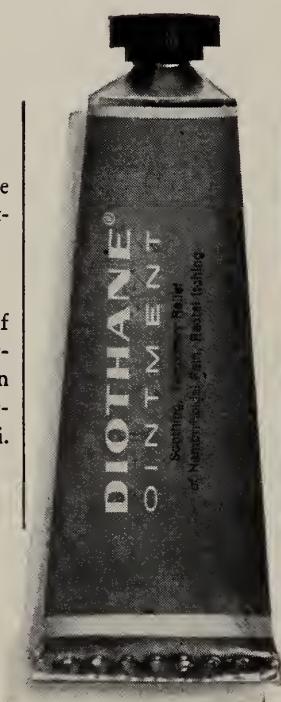
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to protect himself by ignoring his doctor's orders or the directions on the label of his medicine. Even when manufacturer and patient do everything right, an adverse reaction still is possible and medical science probably never will find a way to make it otherwise."

"There is no such thing as 'miracle legislation' which automatically produces a drug utopia." In a speech highly critical of the ethical drug industry at the annual meeting of the PMA, Goddard talked of irresponsibility. He said "too many drug manufacturers may well have obscured the prime mission of their industry: to help people get well." He said he had been shocked by the quality of some of the data on new drugs submitted to the FDA. There also "is the problem of dishonesty in the investigational drug stage," he said.

Goddard further charged that some drug advertisements "have trumpeted results of favorable research and have not mentioned unfavorable research; they have puffed up what was insignificant clinical evidence; they have substituted emotional appeals for scientific ones."

Stetler said after the speech that he and his colleagues feared the talk "might, unfortunately, be interpreted as an indictment of the entire drug industry, because of its overemphasis on isolated instances, without acknowledging the integrity and responsibility which our industry has consistently demonstrated."

"It is an unassailable fact," Stetler said, "that the scientific attainments and standards of performance of the American prescription drug industry have provided an immeasurable benefit to the improvement of health and the prolongation of life."

★

Officials estimate that the hospitalization part of medicare will cost about \$2.3 billion in the first year of the program which starts July 1. Benefit payments under Plan B, the medical part of medicare, are estimated at \$765 million for the first year. Premium collections—\$3 per person per month—are estimated at \$550 million, which will be matched by the federal government.

Persons 65 years or older have until May 31 to sign up for Plan B. The original dead-

line for signing up was March 31. On that date, 1.3 million of the 19.1 million persons 65 or older had not indicated whether they wanted Plan B coverage. About 16.8 million, or 88%, had signed up and one million, or about 5%, had said they did not want the coverage.

President Johnson signed the deadline extension into law at a ceremony at a federally-financed apartment project for the elderly at San Antonio, Texas, while he was spending the Easter holidays at his Texas ranch.

Rep. Durward Hall, M.D., (R., Mo.) reported that a poll of his constituents showed them overwhelming against extending medicare to persons of all ages. Of 13,760 persons replying to a questionnaire, 86.3 percent said "no" to the question: "Do you favor increasing social security taxes to finance a compulsory medical program for the entire population?" "Yes" answers totaled 11.2 percent and 2.5 percent did not answer the question.

★

The federal government received segregation complaints against about 320 hospitals after a special policing agency was set up in the Department of Health, Education and Welfare.

Dr. Philip R. Lee, HEW Assistant Secretary for Health and Scientific Affairs, said about 100 of the complaints were settled by negotiation with the hospitals.

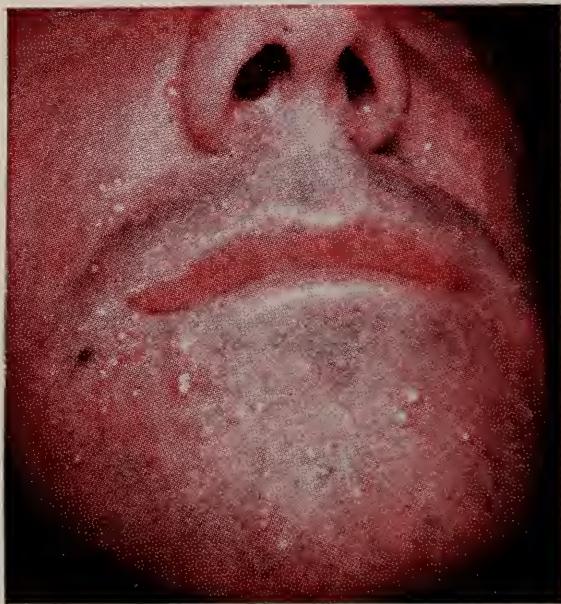
"This leaves us with pending complaints against approximately 220 facilities, most of which have been investigated and found to be out of compliance and therefore ineligible for new federal funds," he said.

★

President Johnson has ordered that steps be taken to give rehabilitation aid to more of the disabled persons on public welfare. In a letter to HEW Secretary John Gardner, President Johnson noted that the federal budget for fiscal 1967 would provide for vocational rehabilitation training for 215,000 handicapped persons, a 25 percent increase over the present year, and added:

"As we plan for the larger program I believe we should do better than we have in rehabilitating persons who are now on our public welfare rolls. In the last several

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**Caution:** As with other antibiotic preparations, prolonged use may result in overgrowth of nonsusceptible organisms and/or fungi. Appropriate measures should be taken if this occurs.

**Contraindication:** This product is contraindicated in those individuals who have shown hypersensitivity to any of its components.

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years, although the absolute numbers have increased the proportion of welfare recipients receiving training has declined from 15% to 13 percent. I think this trend should be reversed. . . .

"I would like you to review the possibilities in this area and report to me with recommendations for federal and state action by June 1."

## MEDICAL NEWS IN TENNESSEE

### Fourth Annual Symposium of Chronic Pulmonary Diseases

The annual symposium of Chronic Pulmonary Diseases, sponsored by the Hamilton County Tuberculosis Society, the Chattanooga-Hamilton County Medical Society, Inc., and the Chattanooga Area Chapter of the American Academy of General Practice, was held May 11-12 at the Holiday Inn in Chattanooga. Speakers and their subjects included: Dr. Thomas L. Petty, Assistant Professor of Medicine, University of Colorado School of Medicine—"BCG Versus Chemoprophylaxis in Tuberculosis" and "Imposters of Tuberculosis & Vice Versa"; Dr. Hurley L. Motley, Professor of Medicine and Director of the Cardio-Respiratory Laboratory, University of Southern California School of Medicine—"Intermittent Positive Pressure Breathing Therapy" and "Pulmonary Function Following Recovery from Tuberculosis"; Dr. John B. Grow, Sr., Denver, Thoracic and Cardiovascular Surgeon; Consultant, Thoracic Surgery, National Jewish Hospital; and Area Consultant, Thoracic Surgery, U. S. Veterans Administration—"Indications for Surgery in Rheumatic Heart Disease" and "Surgery for Tuberculosis." Drs. Petty, Motley and Grow also participated in two round table discussions entitled, "Air Pollution" and "Management of Common Pulmonary Emergencies."

Dr. Robert Samuel Lancaster, Dean of the College of Arts and Sciences and Acting Director of Development, The University of the South, Sewanee, was guest speaker at the banquet held on the evening of May

11th. Dr. Lancaster's subject was "Our Commitment in Southeastern Asia."

The annual symposium is approved for five hours of Category I credit by the American Academy of General Practice.

### University of Tennessee College of Medicine

One hundred and twenty-one degrees and certificates were awarded to graduates from the University of Tennessee Medical Units on March 20th. The commencement address, entitled "As Others See Us," was delivered by Dr. Benjamin Felson, professor and director of radiology at the University of Cincinnati College of Medicine. Dr. Felson is the author of several articles and books, including "Fundamentals of Chest Roentgenology," a textbook widely used in the teaching of radiology. The Charles C. Verstandig award for overcoming the most obstacles toward obtaining a degree was presented to Dr. John Wofford.



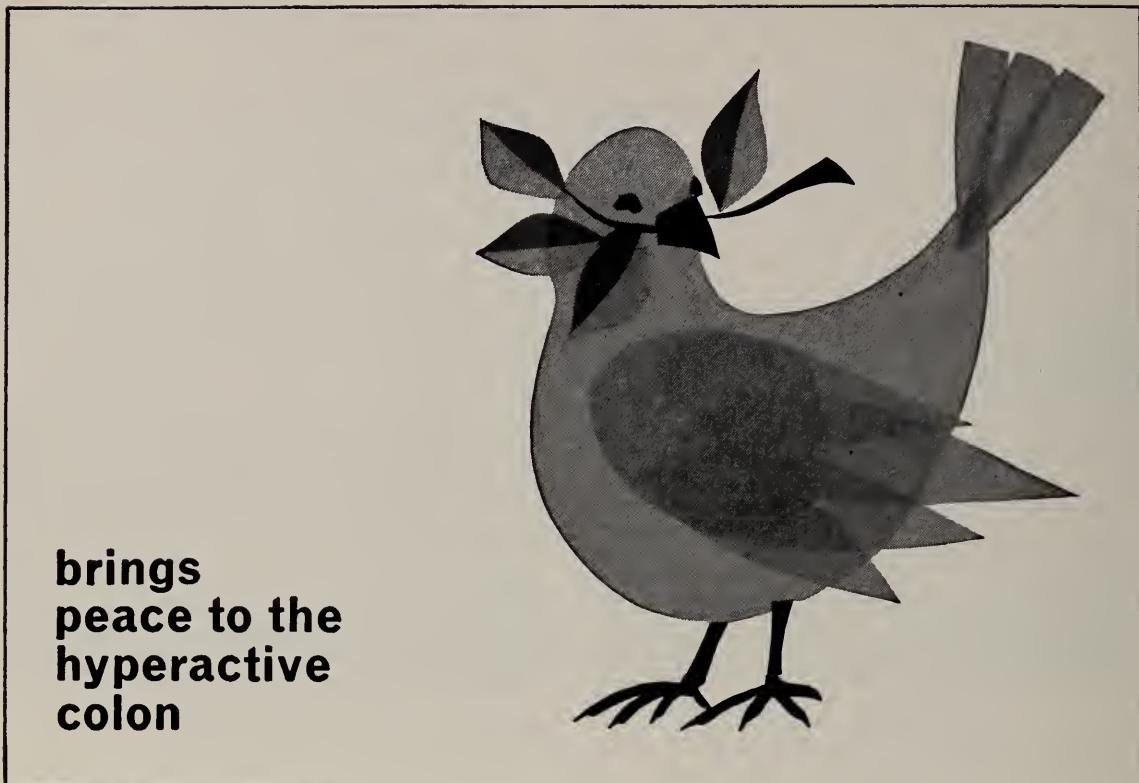
Dr. Gene Stollerman, professor and head of the Department of Medicine has received an unrestricted grant for medical research from Wyeth Laboratories, Philadelphia (Pa.). A limited number of unrestricted grants are presented each year by Wyeth Laboratories to leading U. S. medical schools and hospitals to further medical research.



Dr. David H. Knott, assistant professor of Clinical Physiology, has been appointed a Markle Scholar in Academic Medicine by the John and Mary R. Markle Foundation of New York.



A \$10,000 grant has been announced for Dr. Alvro M. Camacho, assistant professor of pediatrics at the medical units. The grant, the Lederle Medical Faculty Award, is given annually "to encourage academic careers in medicine," and is for living expenses of the recipient and to support research in the problems of endocrinology and metabolism in children. The award is made by Lederle Laboratories, Division of American Cyanamid Company.



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**IN BRIEF:** One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy—withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

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1. Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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Dr. Phil C. Schreier has announced plans to retire as chairman of the Department of Obstetrics and Gynecology in June, a position he has held for twelve years. Dr. Schreier will continue to teach at the University and continue in the practice of medicine. He will be succeeded, effective July 1, by Dr. Stewart A. Fish, currently on the medical faculty of the University of Arkansas Medical Center at Little Rock.



Collected papers from faculty of the Medical Units were featured in the February and March editions of *The American Surgeon*. The two editions contained 218 pages in a discussion of surgical clinical experiences or research conducted by full-time or voluntary faculty. The foreword was by Dr. Harwell Wilson, professor and chairman of the Department of Surgery, who also contributed to one of the discussions.



Four members of the faculty presented an open public forum on latest developments in treatment of arthritis on March 5th. The forum, held in the Sheraton-Peabody Hotel, was sponsored by the Arthritis Foundation and moderated by Dr. Glenn M. Clark, Chief of UT's rheumatology section. The other panel members were Dr. Gene Stollerman, Dr. Jason Starr and Dr. Lewis Anderson.

### St. Jude Children's Research Hospital

Four Memphis physicians have been appointed to the voluntary consulting staff of St. Jude Children's Research Hospital. They are Dr. E. William Rosenberg, dermatology; Dr. J. T. Jabbour, pediatric neurology; Dr. Blaise E. Favara, pathology; and Dr. J. D. Pigott, surgery.

### Meharry Medical College

Meharry observed its 11th annual Student Research Day on March 22nd. The program is designed to provide an opportunity for students who have undertaken investigative problems to report and discuss their results with other students and faculty members. Guest speaker was Dr. Walter F. Lever, chairman of the department of

dermatology at Tufts University and lecturer on dermatology at Harvard University.

### Southeastern Section American Urological Association

More than 600 urologists from throughout the United States and Canada attended the 30th annual meeting of the Southeastern Section of the American Urological Association, April 3-7 in Memphis. A symposium on kidney stone disease was a highlight of the program, with a panel of top authorities in the fields of urology and internal medicine, including Dr. A. Timmerman of Holstein, Germany. Other speakers were Dr. Hugh J. Jewett of Baltimore, Md., president of the American Urological Association, and Dr. Louis G. Welt, chairman of the department of medicine at the University of North Carolina School of Medicine in Chapel Hill.

### Vanderbilt University School of Medicine

Dr. Maurice H. Seevers, Professor and Chairman of the Department of Pharmacology at the University of Michigan since 1942, gave the second of the annual Lamson Memorial Lecture series in memory of Dr. Paul Dudley Lamson, Professor of Pharmacology and Head of the Department of Pharmacology from 1925 to his retirement in 1952.

### PERSONAL NEWS

**Dr. Harrison H. Shoulders, Jr.**, Nashville, has been named director of medical education at Baptist Hospital.

**Dr. John Lay**, Savannah, presented a film produced by the American Cancer Society, "The Million Club" at a recent dinner meeting of the Medical Assistants of West Tennessee.

**Dr. David H. Waterman**, Knoxville, arrived in Corinto, Nicaragua on March 13th to begin a volunteer tour of service on the S. S. Hope. He is among 32 volunteer U. S. physicians beginning a teaching-treatment tour. The Hope will remain in Nicaragua until November.

**Dr. Joseph F. Von Almen, Jr.**, Lewisburg, has been elected to active membership in the American Academy of General Practice.

**Dr. Rufus Clifford**, Columbia, was guest speak-

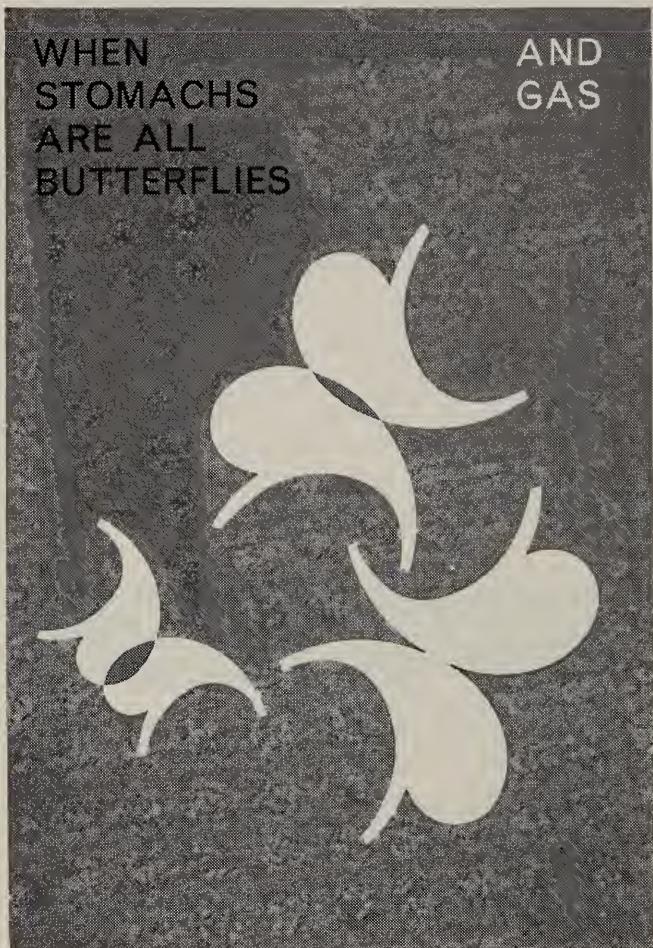
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er at a recent meeting of District 16 of the Tennessee Nurses Association.

**Dr. George M. Cameron** has retired as Director of Laboratories, Tennessee Department of Public Health, after 25 years of service. He received gifts of appreciation in recognition of long and efficient service to the State of Tennessee. **Dr. J. H. Barrick** of Springfield will succeed Dr. Cameron as director of the division.

Governor Frank Clement has reappointed four members of the State Board of Medical Examiners to four-year terms. Those reappointed were:

**Dr. William J. Owens**, Pulaski; **Dr. E. L. Caudill**, Elizabethton; **Dr. Alfred D. Mason**, Memphis; and **Dr. Spencer Y. Bell** of Knoxville.

**Dr. Crampton H. Helms**, Morristown, was guest speaker at a recent meeting of the Rotary Club. Dr. Helms discussed the duties and aims of the American Medical Association.

**Dr. Thomas G. Proctor**, Maryville, will leave in August for Bethlehem, Jordan, where he will be a medical missionary. Dr. Proctor will serve on the staff of Baraka Sanatorium in Bethlehem, where he is going under sponsorship of the Independent Board of Presbyterian Foreign Missions.

**Dr. Ramon S. Vinas**, Crossville, has been installed as a Fellow of the American College of Obstetricians and Gynecologists.

**Dr. Clarence Shaw**, Chattanooga, is the first dermatologist to offer his services to CARE-Medico as a volunteer in his specialty. Dr. Shaw and his wife were scheduled to arrive in Afghanistan on May 1st and will spend a month in the medical schools of Kabul, Jalalabad and Bost. They will return June 3rd.

**Dr. William J. Darby**, Nashville, has been reappointed a member of the Council on Foods and Nutrition and **Dr. Allan D. Bass**, Nashville, has been reappointed a member of the Council on Drugs of the American Medical Association.

## BOOK REVIEW

**ATLAS OF VASCULAR SURGERY.** Edited by Falls B. Hershey, M.D. and Carl H. Calman, M.D. Illustrated by Katherine Murphy and William R. Schwarz. 307 pages. The C. V. Mosby Company, St. Louis, 1963.

The volume contains 14 chapters, beginning with an introduction which defines basic surgical principles and technics and their application to vascular surgery and includes a discussion of the laws of fluid flow and their application to vascular diseases and surgical techniques. The remaining chapters are concerned primarily with surgical procedures but include short descriptions of disease patterns and outlines of various diagnostic procedures to be employed, as well as comments on the preoperative preparation of the patient,

methods of anesthesia and the important aspects of postoperative observation and care.

The second chapter is devoted to a detailed commentary on angiography. The surgical treatment of aneurysms and of arterial occlusive disease are covered in Chapters 3, 4, 5, 8 and 9. Other chapters deal with embolic disease, arterial injuries, portal hypertension, thrombophlebitis and surgery of the veins and sympathectomy. Chapter 14 is devoted to the principles and techniques of amputations and the management of certain infections.

The book is very well organized. The text is written in a clear and concise way, parts of it in outline form. The many illustrations are executed clearly and with just enough detail to be quickly understood.

The volume is useful in the accurate portrayal of the current diagnostic and surgical techniques used in the management of peripheral vascular disorders.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966

#### State

May 19	Middle Tennessee Medical Association, 143rd Semi-Annual Meeting, Shelbyville
Sept. 26-27	Tennessee Valley Medical Assembly, Tivoli Theater, Chattanooga
Oct. 12-13	Second Annual Tennessee Mental Illness & Health Congress, Hotel Hermitage, Nashville
Nov. 9-11	Tennessee Academy of General Practice, 18th Annual Scientific Assembly and Congress of Delegates, Gatlinburg Auditorium, Gatlinburg

#### National

May 26-28	American Gastroenterological Association, Drake Hotel, Chicago
May 30-June 1	American Ophthalmological Society (members only), The Greenbrier, White Sulphur Springs, West Va.
May 30-June 2	American Urological Association, Palmer House, Chicago
June 2-4	American Gynecological Society, The Homestead, Hot Springs, Va.
June 13-15	American Neurological Association, Sheraton-Park Hotel, Washington, D. C.

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**Side effects:** Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

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June 20-23	American Proctologic Society, Sheraton-Cleveland Hotel, Cleveland
June 23-27	American College of Chest Physicians, Sheraton-Chicago Hotel, Chicago
June 25-26	American Diabetes Association LaSalle Hotel, Chicago
June 26-30	American Medical Association, Palmer House, Chicago
Sept. 8-10	American Association of Obstetricians and Gynecologists, The Homestead, Hot Springs, Va.
Sept. 16-24	American Society of Clinical Pathologists, Washington Hilton Hotel, Washington, D. C.
Sept. 17-23	College of American Pathologists, Washington Hilton Hotel, Washington, D. C.
Oct. 1-5	American Society of Anesthesiologists, Sheraton Hotel, Philadelphia
Oct. 1-7	Annual Otolaryngologic Assembly of 1966, New Illinois Eye and Ear Infirmary at the Medical Center, Chicago
Oct. 2-8	American Society of Plastic and Reconstructive Surgeons, Inc., Flamingo Hotel, Las Vegas, Nev.
Oct. 10-14	American College of Surgeons, Fairmont Hotel, San Francisco
Oct. 10-13	American Academy of General Practice, War Memorial Auditorium, Boston
Oct. 15-16	American Association of Ophthalmology, Palmer House, Chicago
Oct. 22-27	American Academy of Pediatrics, Palmer House, Chicago
Oct. 23-26	American College of Gastroenterology, Bellevue-Stratford Hotel, Philadelphia

### 1966 Medical Journalism Awards

The American Medical Association has announced its third annual \$5,000 medical journalism awards program "to recognize journalism that contributes to a better public understanding of medicine and health in the United States." Awards of \$1,000 each will be presented for outstanding reporting on health and medicine in five categories—newspapers, magazines, radio, television, and in newspaper and broadcast editorial

writing. The awards are intended for recognition of outstanding reporting of the scientific and clinical aspects of medicine and will be presented in 1967, based on work published or broadcast during the calendar year of 1966.

Entries may be sent to the 1966 Medical Journalism Awards Committee, American Medical Association, 535 N. Dearborn Street, Chicago, Illinois. Deadline is February 1, 1967 although entries may be submitted at any time prior to that date. General rules and additional information may be obtained from the Awards Committee.

### 1966 Medical Economics Award

A ten-day expenses-paid luxury vacation for two at an exclusive resort in the Bahamas awaits the doctor who wins the top 1966 *Medical Economics* Award for "the best original article by a physician." Two runners-up will receive cash awards of \$500 each. Since 1956, *Medical Economics* has annually encouraged physicians to share their experiences with their colleagues through the pages of the magazine. This is the second year that a top award other than cash has been offered in addition to regular payment for accepted manuscripts. All entries from doctors postmarked by August 31 will be considered. Manuscripts or requests for more information should be addressed to the Awards Editor, *Medical Economics*, Oradell, New Jersey 07649.

### Space Medicine a Program Highlight At Chest Physicians Meeting

A panel discussion on "Cardiopulmonary Aspects of Space Travel" will highlight the 32nd Annual Meeting of the American College of Chest Physicians in Chicago this June. Charles A. Berry, M.D., Chief of Center Medical Programs, NASA Manned Spacecraft Center, will moderate the panel which will feature astronauts Frank Borman, Col., USAF, MC; James Lovell, Capt., MC, USN; Lt. Col. John Ord, USAF, MC, Director of Crew Test and Evaluation, Headquarters AMD, Brooks AFB, Texas and Stuart Bondurant, M.D., Associate Professor of Medicine, Indiana University Medical Center, Indianapolis, will also participate on the panel. The five day meeting will include other panel discussions, seminars, round table luncheon discussions, scientific motion pictures and formal papers. All physicians are invited to attend. For information please contact Mr. Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago, Illinois 60611.

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**COMPOSITION:** Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

**ADMINISTRATION AND DOSAGE:** Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

**SIDE EFFECTS:** Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

**PRECAUTIONS:** If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

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*Literature on indications and dosage available on request.*

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## Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville 12, Tennessee.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

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# Journal of the Tennessee Medical Association

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VOLUME 59

JUNE, 1966

No. 6

## Abstract of Minutes of Council Meetings Tennessee Medical Association Holiday Inn—Gatlinburg—April 18-19, 1966

The Council of the Tennessee Medical Association convened April 18, 1966 in the Holiday Inn, Gatlinburg with the Chairman, Dr. Kenneth L. Haile, presiding. The following members of the Council were present: Dr. J. J. Range, First District; Dr. John H. Saffold, Second District; Dr. M. F. Langston, Third District; Dr. John Derryberry, Fifth District; Dr. Harry T. Moore, Jr., Sixth District; Dr. Carson E. Taylor, Seventh District; Dr. Charles Hickman, Eighth District; and Dr. Byron O. Garner, Ninth District.

As directed by the Council in a previous meeting, two members of the Council had investigated ethical problems existing in their districts. It was reported that one matter in the second district had been found to be ethical and legal; and recommendations were made concerning the problem in the eighth district.

Minutes of a joint meeting of the Council with the Board of Trustees and representatives of specialty societies, involved in the corporate practice of medicine, were read and approved. The Council discussed at length particular arrangements by certain hospital-based specialists which had been proposed to the Council for consideration.

The refusal of the Tennessee Hospital Service Association to agree to separate payment for services rendered by hospital-based specialists was discussed, as well as the proposed meeting between TMA and THSA representatives to discuss mutual problems.

### Meeting of the Council, April 19, 1966

The Council met on Tuesday, April 19, 1966, following the sessions of the House of Delegates. Councilors present were: Dr. J. J. Range, First District; Dr. John H.

Saffold, Second District; Dr. Kenneth L. Haile, Fourth District; Dr. John Derryberry, Fifth District; Dr. Harry T. Moore, Jr., Sixth District; Dr. Carson E. Taylor, Seventh District; Dr. Charles Hickman, Eighth District; Dr. Byron O. Garner, Ninth District; and Dr. B. G. Mitchell, Tenth District.

Dr. Kenneth Haile, Cookeville, was re-elected Chairman of the Council, and Dr. John H. Saffold, Knoxville, was re-elected Secretary.

The Council received a report that the ethical problem in the Eighth Councilor District had been resolved by the State Licensing Board for the Healing Arts.

Subsequent to the last meeting of the Council, Drs. Haile, Range and Saffold, along with Dr. John Burch, Chairman of the Board of Trustees, had met with a representative of the Tennessee Hospital Service Association. It was felt by the Council that it was important that a meeting with the THSA should be with representatives who would be in position to make decisions for each organization. It was reported by Dr. Range that arrangements for such a meeting would be carried out at an early date.

The Dean of the Medical School of the University of Tennessee, presented a formal request to the Council that the Radiology Department of the University be permitted a period of deferment from direct billing because of certain specific problems which have arisen of a financial nature. Since his reasons for the request seemed quite adequate, a motion was made, seconded, and adopted to acquiesce in the request provided the contracts now in effect are cancelled and that reports will be made to the Council of progress in arriving at a final solution to their problem.

The Council discussed Committee Report No. 18, adopted by the House of Delegates, relative to blood banks and medical laboratories. A motion was made, seconded and adopted, to notify the President and Secretary of each County Medical Society in the state with instructions to pass the content

of Committee Report No. 18 along to the membership of the respective county medical society, and also to the ethical relations committee of each society.

JOHN H. SAFFOLD, M.D.  
Secretary of The Council

## Abstract of Minutes of the Meeting of the Board of Trustees, Tennessee Medical Association—Riverside Hotel Gatlinburg, Tennessee Wednesday, April 20, 1966

The Board of Trustees of the Tennessee Medical Association convened for the regular second quarterly meeting, following the TMA Annual Meeting, on Wednesday, April 20, at 9:00 A.M.

*Members of the Board present were:*

John C. Burch, Nashville  
 John H. Burkhart, Knoxville  
 Thomas J. Ellis, Johnson City  
 Robert M. Finks, Nashville  
 G. Baker Hubbard, Jackson  
 K. M. Kressenberg, Pulaski  
 O. M. McCallum, Henderson  
 Tom E. Nesbitt, Nashville  
 Edward T. Newell, Jr., Chattanooga  
 Chas. A. Trahern, Clarksville

The following officers were nominated and elected by acclamation: Dr. John C. Burch, Nashville, Chairman of the Board of Trustees and Treasurer; and Dr. K. M. Kressenberg, Pulaski, Vice-Chairman.

Members nominated and elected to compose the committees of the Board of Trustees were: *Executive Committee*—Drs. John C. Burch, John H. Burkhart, G. Baker Hubbard, K. M. Kressenberg, and Edward T. Newell, Jr.; *Finance Committee*—Drs. Burch, Newell and Hubbard; *Long-Range Planning Committee*—Drs. Burkhart, Hubbard and Kressenberg; *Liaison Committee to Medical Schools in Tennessee*—Dr. W. O. Vaughan, Nashville; Dr. Bland W. Cannon, Memphis; Dr. J. Malcolm Aste, Memphis; Dr. Hubbard and Dr. Trahern; *Advisory Committee to OASI*—Dr. James C. Gardner,

Nashville; Dr. Harmon L. Monroe, Erwin, and Dr. R. B. Wood, Knoxville.

(1) Completed appointments to standing and special committees of the Association for 1966-67.

(2) As required under Public Law 89-97, established a Utilization Committee and a Claims Review Committee on the state level.

(3) Established a Committee on Governmental Medical Services to deal with the over-all facets of all state and federal health care programs.

(4) Selected representatives of TMA to meet with representatives of the Tennessee Hospital Service Association to discuss existing problems between the two organizations.

(5) Approved the certified public accountant's financial audit for 1965. Considered and approved the first quarter financial statement for 1966.

(6) Heard a progress report on regional meetings to be held in May in the four metropolitan cities, designed to present pertinent information to physicians on Medicare utilization and review. Approved an allocation of \$500 for expenses in presenting the programs.

(7) Adopted a motion that the expenses be paid to the alternate delegates for the two regular sessions of the AMA House of Delegates in 1966.

(8) Considered Amendment No. 8 to the By-laws relating to the management of the funds of the Association and directed the

Finance Committee to study the matter, obtaining legal opinion where necessary, and report to the Board of Trustees. Amendment No. 8 as presented to the House of Delegates was not adopted, since it was believed that such a departure from the present procedure should be more carefully considered.

(9) Directed that the Department of Defense and the Office for Dependents' Medical Care be informed of the policy of the Tennessee Medical Association wherein usual and customary fees should be paid to physicians rendering medical care under programs financed through governmental funds; and also that TMA could not enter into a contract using a fixed fee or maximum fee schedule.

(10) Directed the Long-Range Planning Committee to study a feasibility and cost

estimate on possible expansions of the TMA Headquarters Building.

(11) Directed that an appropriate letter from the Chairman of the Board of Trustees be written to the Chairman of the Council requesting that the Council consider the advisability of consolidating smaller societies.

(12) Designated the Committee on Governmental Medical Services to meet with the Governor to discuss Title XIX under P.L. 89-97.

(13) Approved a loan of \$17,000 to the Tennessee Medical Association Student Education Fund.

(14) Approved a recommendation that a plaque of commendation be presented to Dr. J. Malcolm Aste, former Speaker of the House of Delegates for four years and a member of the Board of Trustees.

JOHN C. BURCH, Chairman

J. E. BALLENTINE, Executive Director

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# Abstract of the Proceedings of the House of Delegates Of the Tennessee Medical Association Gatlinburg—April 17-19, 1966

The House of Delegates of the Tennessee Medical Association, meeting at the Civic Center Auditorium, Gatlinburg, Tennessee, April 17-19, 1966, in conjunction with the 131st Annual Meeting of the Association, convened at 1:00 P.M. with Dr. J. Malcolm Aste, Speaker of the House, presiding.

The invocation was rendered by Dr. John H. Burkhart of Knoxville.

**DR. JOHN H. BURKHART:** "Almighty God, our Father, Thou who art the only stable and certain force in a world divided and confused by its own division, we thank Thee for Thy loving care and concern for us and for the charge that Thou has given us to care for and to be concerned about our fellow men. Help us to be capable, kind, considerate, and diligent in the carrying out of Thy purposes. Bless us as we convene today to review our past, to contemplate our present, to plan our future, and inspire us to greater initiation of Thy patience, Thine impartiality, Thy quietness, and Thy steadfastness as we seek to perform the functions Thou hast delegated to our profession. Amen."

Dr. Thomas K. Ballard, Jackson, Chairman of the Credentials Committee, reported a quorum of registered delegates present.

## 1965 Minutes Approved

The Speaker announced that the Minutes of the last regular session were reproduced in the June, 1965, issue of the JOURNAL of TMA and requested that a motion be presented to approve the proceedings as published. It was moved and duly seconded that the Minutes of the 1965 regular session be approved as published in the June, 1965, issue of the JOURNAL. *The motion was adopted.*

## Reference Committees

The Speaker announced the personnel of the Reference Committees to consider reports, resolutions, amendments, and all matters requiring action by the House of Delegates.

### Committee on Credentials

Thomas K. Ballard, Chairman, Jackson  
Carl E. Adams, Murfreesboro  
Perry M. Huggin, Knoxville

### Committee on Amendments to the Constitution and By-Laws

John H. Burkhart, Chairman, Knoxville  
W. D. Dunavant, Memphis  
H. H. Shoulders, Jr., Nashville

### Committee on Resolutions

Wm. T. Satterfield, Chairman, Memphis  
W. O. Vaughan, Nashville  
Chas. C. Smeltzer, Knoxville

### Committee on Reports of Officers

Robert M. Finks, Chairman, Nashville

Julian K. Welch, Brownsville

Durwood L. Kirk, Chattanooga

### Committee on Reports of Standing Committees

George G. Young, Chairman, Chattanooga

John O. Williams, Mt. Pleasant

Tinnin Martin, Memphis

### Committee on Reports of Special Committees

J. O. Hale, Chairman, Johnson City

D. Gordon Petty, Carthage

C. R. Webb, Ripley

### Committee on Outstanding Physician of the Year

Wm. J. Sheridan, Chairman, Chattanooga

Bland W. Cannon, Memphis

W. O. Vaughan, Nashville

### Nominating Committee

As required in the By-Laws, the Board of Trustees had appointed a Nominating Committee with representatives from each of the three grand divisions of the state, with no two members from the same county medical society. The speaker announced the personnel of the committee:

#### **East Tennessee:**

John H. Saffold, Knoxville

John M. Higgason, Chattanooga

Harmon L. Monroe, Erwin

**West Tennessee:**

Harold B. Boyd, Memphis  
 Charles N. Hickman, Bells  
 Arthur C. Dunlap, Paris

**Middle Tennessee:**

Chas. C. Trabue, IV, Nashville  
 John O. Williams, Mt. Pleasant  
 Charles Petty, Clarksville

**Introduction of Amendments**

One amendment to the Constitution and eight amendments to the By-Laws were introduced in the first session of the 1966 House of Delegates. The proposed amendments were referred to the Reference Committee on Amendments to the Constitution and By-Laws for consideration and recommendation. (See minutes of the second session of the House of Delegates for text of amendments and actions thereon.)

**Introduction of Resolutions**

Sixteen resolutions were introduced and assigned to the Reference Committee on Resolutions. The Speaker urged interested persons to appear before the Reference Committee to express their views and stated that an opportunity would be given in the second session for debate and discussion. (See minutes of the second session of the House of Delegates for text of resolutions and actions thereon.)

**REPORTS OF OFFICERS****Report of the President**

**JOHN H. BURKHART, M.D.**

"To serve as the president of a state medical association with a membership of just over 3,000 physicians in a state almost 500 miles long is a great honor, a rare privilege, and a tremendous responsibility. I was aware of all three of these descriptive terms when I took office as President of the Tennessee Medical Association a year ago; I am even more aware of them now."

Dr. Burkhart reported on his activities as President, which included extensive travel to attend state, regional and national meetings, as well as many hours spent in communicating with the TMA headquarters office and key physicians over the state by telephone and through correspondence. To reach the decisions required of the President, he pointed out that there must be

consultation, advice, counsel, encouragement, support, cooperation, and performance on the part of many members of the society. He expressed appreciation to those who thus assisted him in rendering the duties of his office.

As President of the Association during the year that the first major legislation to socialize Medicine was passed by the Congress, Dr. Burkhart stated that he would always be proud of the fight which all of Medicine, including the Tennessee Medical Association, waged so diligently over the years in an effort to prevent such an action; but that he would be just as proud of the way in which Medicine took this defeat of its principles in stride and rallied to attempt to bring something good and workable and acceptable out of what it considers to be bad legislation.

"What Medicine must know and should know already is that defeats occur every day and in the long run are not what count as much as do the victories. Death is a defeat, and the profession of medicine has always used these defeats on which to build stronger and better ways for overcoming them. To lose a legislative battle is discouraging and disheartening and so is losing a patient to disease and death; but neither of these are strong enough to cause a profession like ours to sink to the depths of despair and desolation, but only to challenge us to continue our efforts to combat the evil things in our world wherever we find them, not limited only to those things which afflict the bodies of men.

"There will always be a need for good doctors whether or not in the future they are controlled by federal bureaucracy or continued in the complete freedom of a patient-physician relationship as we have heretofore understood it, or with a variation somewhere in between these two extremes. The dedicated, called, honest, true healer of men will always find his services needed. This is not to say that one system is as good as the other, but only to maintain that the greater call of the profession is a call to service under whatever circumstances, and the physician who will not render this service simply because he deplores or disagrees with the restrictions placed on it has somehow missed the true purposes of his calling. I would rather practice medicine in freedom than to do any other thing I know. But if I cannot do this, then my next choice is to practice medicine with limited freedom.

"Since Cain and Abel were born to Adam and Eve, each generation has been concerned about the attitudes of the succeeding generation. The next generation of healers will not be the same as ours, but I have enough faith in the young people of our community, in the leadership of the older

members of our society, and in the principles which have made our profession the highest calling to which man can aspire to believe that no amount of legislation, bureaucratic interference, or misguided demand for economic subsidization can thwart the purposes of a profession which seeks only to administer to the lame, the halt, and the blind, and to promote the good health and general welfare of the people who need these things.

"Let us not discourage those who come after us, but let us rather encourage them to be what you and I have hoped to be and have tried to be—good doctors, privileged to render aid, assistance, sympathy, tenderness, loving care, concern, relief, and even sometimes to change that which appears to be inevitable. What higher calling could any man have?"

#### Report of the Secretary

CHARLES A. TRAHERN, M.D.

The Office of Secretary is primarily a constitutional office and its duties are commonly associated with the office of secretary in similar organizations. Other than signing and attesting to official documents, the Secretary's duties are mainly conducted by the headquarters staff.

As a member of the Board of Trustees, the Secretary met with the Board in its four regular meetings. In 1966, the Board directed the Secretary to serve as Chairman of the TMA Committee on Exhibits for the purpose of trying to better coordinate and serve the exhibitors showing at the annual meeting. In addition, the Secretary was designated to represent the TMA in quarterly discussions with representatives of the Tennessee Nurses' Association, Tennessee Hospital Association and the Tennessee Nursing Home Association. This is primarily a meeting of the staff heads of these organizations, however since many of the discussions deal with medical subjects, it was felt by the Board that a physician would add greatly to the discussions.

#### Report of the Board of Trustees

JOHN C. BURCH, M.D., Chairman

In addition to telephone conferences and mail ballots on matters requiring immediate attention, the Board held four regular meetings in April, July and October, 1965, and January, 1966. The report of the Chairman

presented an outline of the major actions taken during the year:

—Appointed the personnel of all standing and special committees; members of the Board of Directors of IMPACT; representatives to the Board of the Tennessee Hospital Association Education and Research Foundation, and a representative on the Health Careers Committee of the Foundation; recommended appointments to the Board of Directors of TMA's Student Education Fund; recommended a replacement for an unexpired term on the Public Health Council; selected five nominees for the State Board of Nursing; appointed the Nominating Committee; and directed that a member of the Board attend each of the Reference Committee meetings of the House of Delegates.

—Established and appointed a Study Committee on Physician-Osteopathic Relations; appointed a Planning Committee for the Second Congress on Mental Illness and Health to be held in 1966, and allocated funds not to exceed \$3,000 for the program.

—Considered the year's financial audit and quarterly financial reports. Approved the budget for 1966. Approved increase in Journal advertising rates. Approved a recommendation of the Long Range Planning Committee to present a resolution in the House of Delegates to increase the dues for membership in the TMA in the amount of \$15.

—Considered methods to improve the annual meeting in an effort to increase interest and attendance and approved a recommendation to present an amendment to the By-Laws which would authorize the Board to determine the dates of the meeting each year.

—Studied and became informed on regulations under Public Law 89-97 as they were established, made recommendations where needed, and established policy positions of the Board on important phases of the program. Prior to a meeting of TMA representatives with the Technical Policy Committee of the State to consider questions regarding the 1965 Social Security Amendments, the Board approved the following statement of policy:

(1) That current practices and customary procedures with respect to certification of hospital admission and care should be continued under Public Law 89-97 and that hospital utilization committees should be composed only of practicing physicians. (2) That the charges for the services of hospital-based specialists should be billed and collected in the same manner as are the fees of other physicians . . . and that the AMA position to vigorously resist efforts to change this provision in the law be supported. (3) That all governmental programs, federal and state, reimburse physicians according to the usual and customary fee within the community without reference to any existing payment schedule as a basis . . . and that the medical aspect of Title XIX and Title II of P.L. 89-97 (grants to the states for public assistance) be administered by the Department of

Public Health. (4) That the Claims Review Committee be designated to meet with the fiscal intermediary for Part B. (5) That an individual physician, acting independently and not in concert with others, may lawfully and ethically elect to treat or not to treat persons under the Medicare program, and that medicine will oppose any program which will interfere with the physician's freedom of choice with respect to participation or the acceptance of financial arrangements under which he shall provide care. (6) That the Legislative Committee be assigned to conduct the continuing study of all facets of the administration of P.L. 89-97 and its implementation and report to the Board of Trustees at regular intervals.

—The Board endorsed AMA policy and approved payment of the usual, reasonable and customary fees to physicians for services rendered to beneficiaries under federal health care programs. Established a Utilization Committee and a Claims Review Committee on the state level; and recommended that the commercial insurance industry be designated as the fiscal intermediary for payment of physicians under Part B of the Medicare Act.

—Studied the matter of physician compliance with the Civil Rights Act of 1964. Discussed AMA and TMA policy re dispensing of eyeglasses by ophthalmologists.

—Accepted reports from the Committee on Health Insurance, Committee on Hospitals, Committee on Legislation and Public Policy. Heard reports on AMA annual and clinical meetings. Approved six recommendations of the Committee on Blood Banks and Medical Laboratories.

—Endorsed the Automobile Crash Injury Research Program by Cornell Aeronautical Laboratory, co-sponsored by TMA, the State Public Health Department, the Highway Patrol and the Tennessee Hospital Association. Endorsed in principle a recommendation of the TMA Council concerning hospital uniform billing and cost accounting.

The report concluded with commendation and an expression of appreciation to the members of the Board of Trustees and Mr. Charles L. Cornelius, Jr., TMA Attorney, for their capable and conscientious service during the year.

#### Report of Treasurer

JOHN C. BURCH, M.D.

The Treasurer's report contained the official audit conducted at the close of December, 1965, by Grannis, Jones & Bond, certified public accountants of Nashville. The Budget for 1965 was closely adhered to, but in some instances, it was necessary to approve additional expenditures. However,

expenditures were held within the amount approved by the Board.

The following is a condensed statement of cash receipts and disbursements for the calendar year, 1965, and a balance sheet of the financial condition of the Association.

#### TENNESSEE MEDICAL ASSOCIATION

#### BALANCE SHEET—DECEMBER 31, 1965

##### ASSETS

Current Assets	\$ 91,456.66
Reserves	216,240.09
(Savings, Investments & Bonds)	
Fixed Assets	72,762.82
(Land, Headquarters Building & Equipment)	
Liabilities	886.59
(Accrued Payroll Taxes)	

#### OPERATING STATEMENT

#### Year Ending December 31, 1965

(Consolidated Financial Statement—January 1—December 31, 1965)

##### INCOME

Exhibits and Annual Meeting Income	\$ 8,113.00
TMA Dues	114,720.00
Journal Advertising	23,129.03
Investment Income	9,155.65
Miscellaneous Income	5,017.93
	_____
<b>TOTAL RECEIPTS</b>	<b>\$160,135.61</b>

##### DISBURSEMENTS

AMA Delegation	\$ 4,324.68
Annual Meeting	12,150.96
Attorney & Auditing	5,150.00
Board of Trustees—Committees—Council	4,275.92
Headquarters Building	4,130.21
Journal—TMA	33,618.91
Journal Overhead Allocated	(9,057.25)
Legislative Expense	9,193.03
Postage—Printing—Supplies	5,452.06
Payroll Tax & Property Tax	2,610.33
Telephone & Telegraph	3,413.70
Staff Salaries	51,985.02
Staff Travel	4,850.64
IMPACT	1,000.00
Education Campaign (Eldercare)	7,034.77
Miscellaneous and other expenses	7,214.43
	_____
<b>Total Operating Expense</b>	<b>\$147,347.41</b>

##### 1966 BUDGET

Anticipated income from all sources	\$159,320.00
Appropriations for 1966 .....	179,415.00
Budget Deficit for 1966 - - -	\$20,095.00 (To be taken from reserves.)

#### Report of the Council

KENNETH L. HAILE, M.D., Chairman

The corporate practice of medicine was the major problem confronting the Council

in 1965. As directed by the House of Delegates, the Council requested that the physicians involved, through their specialty societies, work out a solution to the problem that would comply with the Code of Ethics of the TMA and the AMA. The House also established a deadline of April 1, 1966, for the modification of any unethical or illegal contracts between physicians and hospitals.

Following a meeting with representatives of the specialty societies, the Council received and approved statements or resolutions of intent to comply, from the Tennessee Society of Pathologists, the Tennessee Radiological Society and the Society of Anesthesiologists.

Recognizing the need for time for an orderly progress to implementation of these agreements, the Council suggested to the House of Delegates that the deadline be extended to July 1, 1966. The Council also recommended that the TMA arrange to aid these physicians by financial assistance for legal aid or whatever additional administrative support that may be required in order to permit them to terminate the corporate practice of medicine and to practice medicine in an ethical manner as defined by the AMA Code of Ethics.

The report called attention to the policy adopted by the Tennessee Hospital Association regarding hospital-based specialists, the ethics of physicians and the matter of the corporate practice of medicine, and stated that it was the opinion of the Council that the TMA should take a firm stand to abide by its principles, previous directives of the House of Delegates and the Code of Ethics of the medical profession.

The Chairman reported relatively few individual breaches of medical ethics presented to the Council and stated that the most commonly occurring one was where a physician serves as an unauthorized intermediary in violation of state adoption laws. The Council recommended that each physician read the Adoption Laws of the State and abide by them.

#### Report of Executive Director

J. E. BALLENTINE

The report of the Executive Director pre-

sented a brief review of the most important operations of the Association in 1965-66. The report pointed out that TMA is an expanding organization with many complex problems—showing the Association acting and reacting to the great burst of medical knowledge, socio-economic development, rapidly changing laws, legislative issues and changes in the environment of medicine. The report stated that TMA has grown in stature and influence and expanded its scope of interest and service to the public and the profession—it has necessarily grown in size—in membership—in staff—in budget—and in its efficiency and its ability to perform the services for which it exists.

Accelerating demands for services have required increased staff, better methods, greater efficiency and adaptability. Progress has meant new methods, new system and expansion. The report also outlined the function of the Division System and the activities of the TMA committees.

The responsibility of the TMA staff was reported as requiring maximum effectiveness in carrying out the programs inaugurated by the House of Delegates, the Board, Council and Committees of the Association. The staff is responsible to generate imaginative—practical ideas for furthering the objectives of the Association and to provide knowledgeable counsel to Officers, to the Board and to the Council and Committees. The staff also is required to direct a continuing flow of information to TMA members, to local medical societies, to other organizations, to the communications media, and to the public.

The Executive Director's report revealed the multitude of business, activities and finance, correspondence, records and research, planning and preparation of meetings and programs and producing of materials that are lengthy in the requirement of time and study. The Association, with the staff are heavily involved with State health and welfare programs, dependents medical care programs, and health insurance. Legislation on the state and national level require many man-hours of committee and executive time.

The membership report as of January 1,

1966, showed TMA with 3,130 active members. Ninety-four percent of TMA members are also members of the American Medical Association. It was stated in the report that by 1967, TMA would have sufficient active AMA members to qualify for a fourth delegate in the House of Delegates of the American Medical Association.

The Executive Director reported that the presentation of monthly reports to the Treasurer, quarterly reports to the Board of Trustees of the financial status of the Association are regularly presented. The report also outlined the work of the Field Secretary and the announcement to the House of the employment of a full-time staff-man serving as Field Secretary to county medical societies. TMA can and should assist the local medical societies in their important missions. The State Association must be responsive to their needs, without over-shadowing or absorbing functions which more properly and more profitably can be done at the county society level. The whole of TMA will gain strength and vitality as the local societies become stronger and more effective.

With the implementation of Medicare and other federal programs, physicians will be compelled to rely more and more upon their medical associations. To represent the profession effectively, medical societies will need the participation of a greater number of physicians. Medical societies must exert intelligent and energetic leadership in the months ahead. At this time—more than ever before—the need is for unity of purpose, freedom of thought, optimism, and most of all—a high morale.

The federal government, the proposed medical complexes, and the hospital-based system is combining to "mold and shape the pattern of health care in this country". This triumvirate of forces has enormous potential for drastically altering the pattern of medical education, research and service. The medical profession must be prepared to seize the initiative and keep it on the vital issues of medical education, rising health care costs, quality controls, ethics and discipline, and strengthening the medical federation at the state and local levels.

The report stated that TMA is of such a

nature, and its commitment to medicine and the public is so great that it cannot escape new and larger responsibilities. No one doubts that the federal government's new Medicare Program will have a staggering effect upon the practice of medicine and on health care.

The report concluded by pointing out that if the Association is to be effective, it must be effective on the local level. The Tennessee Medical Association and local societies are the critical foundation of the federation. The county society should be looked to by the people in a community as a principal source of leadership in health—as a fountainhead of varied programs and activities involving physicians and people working together for the public good.

## REPORT OF STANDING COMMITTEES

### Report of Committee on Scientific Work and Postgraduate Education

The report concerned itself with the JOURNAL and the scientific program of the annual meeting, since the Committee had not been presented with any item relating to postgraduate education.

**Journal**—Volume 58 of the JOURNAL (1965) contained 134 pages of text, a further decrease from Volume 57. Advertising totaled 534 pages, an increase of 30 pages over 1964. Though the ratio of text to advertising in 1964 stood at 50:50, in 1965 it came closer to the more ideal of 60% ads to 40% text as a means of covering Journal costs.

The Editor urged the membership to read the Yellow Pages prepared by the headquarters staff, the President's Page, the editorial page and other sections of the JOURNAL with content directed to education in matters social, economic and political. He pointed out that every effort had been made to provide understanding of the problems which faced and continue to face organized medicine.

**Scientific Program**—Again in 1966, the presentations of the specialty societies were offered as the major portion of the scientific program. Since the combined meeting of the Obstetric, Pediatric and General Practice groups had been enthusiastically re-

ceived in 1965, the combined effort was repeated this year. A special program on "Immunizations" was arranged after consultation with representatives of general practitioners and pediatricians, and was expected to be informative and of interest to many members.

The Chairman pointed out that it was the feeling of those who had been involved in the planning of the scientific program for many years, that there is a need for a completely "new look" unbiased by past experience; and that a recommendation had been made to the Board of Trustees that the Committee on Scientific Work be reconstituted for the planning of the program for future meetings.

#### **Report of Committee on Hospitals**

**A. Roy TYRER, JR., M.D., Chairman**

The Committee's interest in 1965, to a significant degree, had been dictated by the passage of the Medicare Law. Since the implementing regulations of the law have not been completed, the Committee's sphere of activities, however, were somewhat limited.

The report of the Chairman presented an outline of matters considered by the Committee and actions taken:

(1) Discussed the subject of hospital medical staff obligations, privileges and responsibilities as recommended by the Reference Committee on Standing Committees in 1965. The problem appeared to be principally one of communication and implementation rather than definition, and a request was made to the Board, with approval received, to initiate plans for holding a statewide institute sponsored jointly by TMA and THA designed for medical staff officers, directors of nursing, and hospital administrators, for the purpose of improved liaison and closer cooperation in problems of mutual interest.

(2) Recommended that TMA appoint a Utilization Review Committee in keeping with the requirements of the Medicare Law.

(3) Approved the TMA Council sponsored resolution, presented and adopted at the AMA Clinical Session, relating to uniform accounting for hospitals and the separation of physicians' charges from hospital charges.

(4) Reviewed and approved TMA's statement to the Legislative Council regarding the Nurse Practice Act.

(5) Approved the THA Guide for Hospital-Nursing Home Affiliation, with modification to identify doctors' care as "physicians' services"

rather than "professional services," and to include a clearer statement regarding patient billing for services of hospital-based physicians in distinction from regular hospital charges.

(6) Established a three-member Executive Committee of the Hospital Committee to meet at regular intervals with THA's Executive Committee for improved liaison between TMA and THA.

#### **Report of Committee on Legislation and Public Policy**

**A. ROY TYRER, JR., M.D., Chairman**

The principal activities of the Committee during the year were directed to preparations and decisions for the 1967 General Assembly. The following decisions were made by the Committee and appropriate action taken:

(1) Decision to reproduce a TMA Legislative Manual for the 1967 Tennessee Legislature similar to that prepared in 1965.

(2) Approved continuation of the doctor-contact system for the 1967 Legislative Session, including plans to establish personal liaison early with the candidates wherever possible. Medical society presidents in the metropolitan areas were requested to appoint on their Legislative and Public Policy Committees, physicians who will assume responsibility in planning and supervising the doctor-contact system in their area.

(3) Encourage improved liaison with other groups and organizations which might provide helpful influence in legislative matters of a medical interest, recognizing that reciprocal assistance might be expected.

(4) Recommend that a Medical Society sponsored dinner be held within a few days following the election in each of the metropolitan areas for the Legislative delegation from that area. In the smaller communities, it is thought that one or more physicians may plan a dinner for the legislator in their homes.

(5) Approved continuing effort directed toward the establishment of a first-aid station in the State Capitol during the period of the Legislative Session, which has proved an effective public relations method in some states where it has been used. This would probably be a joint effort with THA who has expressed an interest in it.

(6) Represented TMA before the Legislative Council regarding its study of the Nurse Practice Act.

(7) Planned the annual Washington Trip for the purpose of maintaining close liaison with Tennessee's congressional representatives.

(8) Encourage and urge selected interested physicians to be candidates for the State Legislature.

(9) Encourage by all reasonable means continued annual support of IMPACT-AMPAC by all physicians.

The Chairman expressed appreciation to

each member of the Committee and invited suggestions, ideas and criticisms from members of the House of Delegates.

#### Report of the Liaison Committee to The Public Health Department

Wm. A. HENSLEY, M.D., Chairman

The Committee recommended to the Department of Public Health that "Suggested Guide Lines for the Care of Stroke Patients" be sent only to physicians instead of hospitals and nursing homes. The Department was cooperative in this matter to the extent that this information was directed to the physicians of the state rather than the hospitals and nursing homes and a few suggestions made by the Liaison Committee were incorporated in the revised version.

The Crippled Childrens' Service was discussed at length in the meeting of the Liaison Committee with the Public Health Council on November 10, 1965. The Crippled Childrens' Service Advisory Committee had reviewed the system of payment to physicians and had submitted a recommendation that the Public Health Council adopt policies for the payment of professional physicians' services under the programs with which it is concerned, which are consistent with the expressed policy of the AMA and the Board of Trustees of the Tennessee Medical Association, and further recommended that steps be taken to implement this policy as soon as possible and practicable. No action was taken at the meeting, and the Committee requested further information and direction from the House of Delegates.

The Committee on Blood Banks and Medical Laboratories made a report to the Board of Trustees on January 9, 1966 relative to the problem of regulating medical laboratories and one item in the report had been referred to the Liaison Committee: "That the Board suggest to the Commissioner of Public Health that the laboratories properly supervised by physicians should be the only laboratories certified as a provider of services under P.L. 89-97, if they meet the required criteria for certification".

The Commissioner of Health had advised

that decisions concerning this would have to await receipt of regulations from the Department of HEW under which his Department would be governed in inspecting laboratories.

The Chairman reported that no matters of importance had been referred to the Committee for further consideration or action by the House of Delegates.

#### Report of Committee on Insurance

Wm. T. SATTERFIELD, M.D., Chairman

The Chairman reported that the seven group insurance plans of TMA (Disability, Major Hospital, Life, Medric, Business Overhead, Investment Retirement Trust, and Professional Liability) had progressed satisfactorily and that there had been a minimal number of complaints during the year.

The major hospitalization plan (a problem for all insurance carriers) has had frequent modifications and the Committee is alert to obtaining for TMA the best obtainable in this important area.

The report called attention to the fact that Tennessee and national experience had revealed an alarming increase in professional liability claims and premium rates and that it was possible that governmental programs could also have an effect on this type of insurance. The Chairman recommended that efforts at the local society level toward education and advice should be made promptly.

In summary, the chairman reported that the TMA group insurance plans are being administered efficiently and are of great benefit to members who participate.

#### Report of the Committee on Cancer

B. F. BYRD, JR., M.D., Chairman

There had been no occasion for a formal meeting of the Committee during the year, however, various members of the Committee had been active in the program of cancer education, both lay and professional, in their respective communities. The Chairman expressed appreciation to members of the Committee for their willingness and

availability in connection with the Cancer Control Program of the State of Tennessee.

#### Report of Memoirs Committee

HENRY L. DOUGLASS, M.D., Chairman

The Memoirs Committee reported that forty-seven members of the Tennessee Medical Association died during the calendar year 1965. The names of the deceased physicians were read by the Chairman.

"Most of these to whose memory this report is dedicated were born in the closing years of the 19th century and began their medical careers in the opening years of the 20th when life expectancy for man was only 46 years. They belonged to a generation that is fading out when life expectancy is 66 years. Twenty years had been added to the longevity of our race in the life span of their generation. Surely there has been no other fifty years and no other generation that has contributed more to humanity. Of course we must look to the future and the complex problems that loom ahead and even now weigh heavily upon us, but we cannot forget the past. It is our heritage, our challenge and our inspiration, to meet that challenge."

#### Report of Committee on Health Insurance

B. K. HIBBETT, III, M.D., Chairman

The Health Insurance Committee, after being directed by the House of Delegates in April, 1965, to organize a broad and more comprehensive service plan, established a relative value system using the 1964 California Relative Value System, the American Radiological Relative Value System, and the American Urological Relative Value System as guidelines, and set a \$5.00 per unit value. The relative value system and the unit value had been submitted to actuaries to determine if it would be feasible for insurance companies to sell the plan.

However, before actuarial experience could be obtained, the AMA approved the usual and customary fee concept as the basis for reimbursing physicians participating in health programs financed with federal monies; and urged the individual physician to adopt the usual and customary fee concept to all third parties. The report pointed out that the Board of Trustees, through a resolution, had recommended to the House of Delegates that physicians should be reimbursed according to the usual and

customary fee within the community without reference to any existing payment schedule.

In view of this, and since a great many physicians over the State had resigned from the Tennessee Plan because they felt it was outmoded, and it would be used as a yardstick for a great number of the plans that were destined for the future, it was the decision of the Committee to remove the service benefits from the Tennessee Plan, to delete the name "Tennessee Plan" and remove all riders.

The Committee submitted three resolutions for consideration by the House of Delegates: (1) To discontinue service benefits under the Tennessee Plan. (2) To authorize the Committee to establish a relative value system for Tennessee in order that it could be used to help organize insurance plans in the future. (3) That a broad comprehensive non-service plan be developed, using the relative value system the committee is now working on, with reimbursements being made to physicians according to their usual and customary fees in their respective communities.

#### Report of Committee on The Dependents' Medical Care Program

B. K. HIBBETT, III, M.D., Chairman

The Executive Sub-Committee of the Health Insurance Committee met on several occasions to consider changes in the Dependents' Medical Care Program as proposed by the Department of Defense, however no significant changes were made.

The Committee recommended that if the resolutions before the House of Delegates asking that payments to physicians in the future be made on the usual and customary fee concept are adopted, that any contracts in the future with the Office of Dependents' Medical Care be negotiated on a usual and customary fee basis.

#### Report of Advisory Committee to the State Department of Public Welfare

K. M. KRESSENBERG, M.D., Chairman

Following the annual meeting in 1965, the Committee presented suggestions to the

Commissioner of Public Welfare: (1) that a medical review officer for each hospital in the state be appointed; (2) that the amount of hospitalization which a patient could obtain without an additional extension request form being filled out, be increased to fifteen days; (3) an additional ten days of hospitalization for Medical Aid for the Aged recipients; (4) increased payments to hospitals and nursing homes; and (5) additions to the drug formulary. The Chairman reported that these suggestions were accepted and now included in the MAA program.

During the year, Mr. Roy Nicks was appointed Special Assistant to Governor Clement and Mr. Herman Yeatman, formerly Deputy Commissioner of the Public Welfare Department, replaced him as Commissioner of Public Welfare. The Advisory Committee met with Commissioner Yeatman on February 9th at which time the drug formulary was reviewed and the Committee recommended numerous changes and additions to the formulary. It was reported that the drug program had grown tremendously in the past three years and during the first six months of fiscal year 1966, the total expenditure for drugs under the OAA and MAA programs was approximately \$950,000.

In the February meeting, a general discussion was held with Commissioner Yeatman and his staff relative to the future of the MAA and OAA programs in conjunction with the new federal legislation. It is uncertain as to what the role of the MAA and OAA programs will be under the Medicare Law, both under Title XVIII and Title XIX, however the Committee had discussed the implications with Commissioner Yeatman and other members of his department and, at present, the Welfare Department is obligating themselves to pay the deductibles and monthly premiums for recipients of OAA for Part A and Part B of the Law. It has not been officially decided what department of the State will administer Title XIX of P.L. 89-97, and the future role of this Committee will depend to some extent on what decision is made relative to this by the State Administration.

The Chairman of the Committee attended

several conferences in Chicago with the AMA and officials of the Department of HEW to discuss possible regulations and requirements relative to the implementation of Public Law 89-97 and also a special conference relative to the implementation of Title XIX.

#### Report of Communications and Public Service Committee

O. MORSE KOCHTITZKY, M.D., Chairman

The Committee met in October, 1965, and the main item for consideration was the implementation of a resolution adopted by the Board of Trustees at the recommendation of the Long-Range Planning Committee. It was resolved that members of the Board of Trustees, along with members of the House of Delegates, should serve as part of the TMA communications armamentarium and the Communications and Public Service Committee was charged with fully developing this concept. Efforts had been made by members of the Board of Trustees to accomplish this purpose and the Chairman urged members of the House of Delegates to assist in the effort; to relay the proceedings and information disseminated during the annual meeting to his county society; and to encourage members of his society to take an active part in the activities of that society since decisions of the TMA are principally formulated or implemented at the county level.

The activities of the Committee during the year had resulted in positive programs to enlighten public opinion in regard to the problems of health care. The report called attention to the success of "Spotlight on Medicine," a 30-minute television program currently being programmed over TV stations in Jackson, Nashville and Knoxville. The programs utilize professionally produced and medically correct films for approximately fifteen minutes and a live panel, composed of three local physicians and a station moderator, for the remaining fifteen minutes. A total of 117 different members of the Association had given or will be giving of their time to appear on 39 different programs.

The Chairman requested each county so-

society represented in the House of Delegates to participate in the annual observance of **Community Health Week** in November, since this activity offers an opportunity to improve the "image" of physicians, while at the same time calling attention to the fact that protecting and improving public health is largely a community effort.

The Physicians Placement Service, administered through the Public Service Office, performed a valuable service of aiding physicians who wished to locate or relocate their practices in Tennessee, as well as helped physicians and communities in securing the services of a physician.

It was reported that at the end of 1965, TMA totaled 2,955 regular dues paying and veteran members of the AMA. With the addition of only 46 members in 1966, Tennessee would be entitled to a fourth delegate in the AMA House of Delegates in 1967. An effort had been made by the Committee to encourage AMA membership, and a personal letter had been written by the Chairman to each TMA member who did not belong to AMA, urging him to join in 1966. The delegates were requested to work toward this goal by encouraging any member of his society who has not paid AMA dues this year to do so at the earliest possible time.

#### Report of Grievance Committee

WM. J. SHERIDAN, M.D., Chairman

The Grievance Committee of the Tennessee Medical Association serves primarily as an appeal committee, and in those cases where they are presented directly to the Association, they are forwarded to the county medical society where the complaint originates. There were no complaints or grievances appealed to the State Committee during the year. All such grievances were settled at the county level and the functioning committees of the county medical societies were commended for their outstanding service in this respect.

#### Report of Rural Health Committee

JULIAN C. LENTZ, M.D., Chairman

The foremost activity of the Rural Health Committee is to co-sponsor a Rural Health

Conference annually with the Tennessee Farm Bureau Federation and the University of Tennessee Agricultural Extension Service.

On October 5, 1965, the third Rural Health Conference was held in Nashville. A total of 209 persons registered for the meeting which far exceeded the attendance at either the first or second conference. Thirty-eight counties were represented by members of the medical profession, home demonstration club members, county agents, extension service personnel and farm bureau members. An excellent program was presented and was well received by those in attendance. Plans are being formulated to conduct the fourth conference in the Fall of 1966 in the Eastern grand division of the state.

It was the opinion of the Chairman that the work of the committee in conducting the annual conference fulfilled its constitutional obligation, "to promote the improvement of health standards in rural areas of Tennessee". Delegates in the general area of the conference each year were urged to make every effort to attend and to encourage their colleagues in their respective societies to do so as well.

#### Report of Committee on Tennessee Medical Foundation

HARRISON J. SHULL, M.D., Chairman

It was reported that the project at Pruden Valley which received the major efforts of the Foundation for several years had ended. This effort to supply medical facilities to a needy community, for a time, paid respectable dividends, until supporting structure of the entire community economy collapsed. The Consultative program which carried specialty assistance to Oneida, Monterey and Palmer for a number of years, was discontinued in the spring of 1965 when the United Mine Workers withdrew financial support which had made this program available. The pilot study aimed at testing the possibility of assisting in the maintenance of quality performance of clinical laboratories in Community Hospitals which felt the need of such special consultative assistance, received attention at Har-

riman and at Shelbyville but the utilization of the program was not sufficient to justify further efforts to pursue the original objectives in this field.

No long range projects are planned at present by the Tennessee Medical Foundation, however the Chairman suggested that liaison between the Tennessee Medical Association and the Foundation be maintained; and that the Committee remain alert to avenues by which the facilities of the Tennessee Medical Foundation may be used in the rapidly changing medical scene.

**The above reports were referred to Reference Committee (A) on Reports of Standing Committees.**

#### REPORTS OF SPECIAL COMMITTEES

##### **Report of Committee on Occupational Health**

HARMON L. MONROE, M.D., Chairman

The Committee on Occupational Health presented a resolution to the House of Delegates resolving that the Legislative and Public Policy Committee of the Tennessee Medical Association prepare and present to the next General Assembly of the State of Tennessee a resolution requesting that the Legislative Council be directed to make a complete and detailed study of our present Workmen's Compensation system and make recommendations for new laws that would enable the employee and employer to receive the maximum benefits and productivity possible under our free-enterprise system.

It was the opinion of the Committee that the present law should be updated, increasing employee benefits with a minimal cost to employers; and that the record in rehabilitation of the Workmen's Compensation system needs an overall strengthening since the greater emphasis in compensation laws had been placed upon indemnification of the injured worker rather than on rehabilitation.

##### **Report of the Advisory Committee to the Woman's Auxiliary**

ROLAND H. MYERS, M.D., Chairman

"The Woman's Auxiliary to the Tennessee Medical Association concentrated their energies this

year in two major fields, Education and Community Service. For the past few years they have kept Tennessee at the top of the American Medical Association Education and Research Foundation in one or more categories and expect to exceed last year's total of \$19,925.25 to win again in June at the AMA Meeting. Nurse recruitment and all phases of Health Careers have been stimulated through scholarships and instructive programs. Community service has ranged from training non-professional help to 'baby-sit' with handicapped persons to a five-day-a-week volunteer program at a metropolitan Juvenile Court."

It was reported that one new Auxiliary had been organized in Wilson County and another is underway in Union City. Details of the excellent work of TMA's very capable Auxiliary will be included in the report of the President of the Auxiliary.

##### **Report of Committee on Blood Banks and Medical Laboratories**

CHAS. C. SMELTZER, M.D., Chairman

The Board of Trustees instructed the Committee on Blood Banks and Medical Laboratories to study the problem of regulating medical laboratories and to submit recommendations. The Committee met in December, 1965, and after thorough and complete consideration of the problem made the following recommendations to the Board of Trustees.

1. No effort should be made in the immediate future to amend the Medical Practice Act.

2. The committee feels that an educational program for the TMA membership should be undertaken and that consideration be given to the publication of a roster of physician supervised laboratories in the state, similar to the Texas publication. The utilization of the TMA Journal for dissemination of information to the membership was also an area suggested.

3. The type of training of laboratory personnel under physician supervision should be part of the educational program to explain the three levels of training—Medical Technologists, a four-year degree program; Certified Laboratory Assistant, a one-year program after graduation from high school; and the Office Laboratory Assistant program, designed to give proper training to personnel employed in physicians' offices to qualify them to perform a limited number of routine laboratory tests.

4. The committee reaffirms the policy contained in Resolution No. 7, adopted at the 1964 annual meeting of TMA, which states, in part, that the performance of laboratory work constitutes the practice of medicine and the licensure of laboratories is opposed.

5. Call to the attention of the Board of Trustees that the Tennessee Department of Public Health, as the state agency designated to aid in implementing P.L. 89-97 (Medicare), will inspect laboratories within the state, utilizing rules and regulations passed down by the Department of Health, Education and Welfare, prior to certifying laboratories as qualified providers of services under the law. The Committee feels the Board should suggest to the Commissioner of Public Health that laboratories properly supervised by physicians should be the only laboratories certified as a provider of services under P.L. 89-97, if they meet the required criteria for certification.

6. The committee feels that the TMA Council should be the body designated to emphasize the facts outlined in these recommendations to the membership of the Tennessee Medical Association, insomuch as the Council is the one body of TMA charged with the maintenance of proper ethical conduct of the membership.

#### Report of the Committee on Mental Health

FRANK H. LUTON, M.D., Chairman

The report contained four recommendations made by the Committee in the past several years which it was felt needed re-emphasis and further implementation: (1) The development of programs with psychiatric content at the county medical society level. (2) Stimulation of interest by all physicians in the problem of mental retardation. (3) More active participation in legislation, community planning and membership in local mental health organizations. (4) Active involvement of the physician in such problems as the emotionally disturbed child, alcoholism and drug addiction, non-narcotic dependence.

The House of Delegates in 1965, adopted a resolution authorizing a Second Congress on Mental Illness and Health, to be jointly sponsored by the TMA, the Tennessee Mental Health Association and the Woman's Auxiliary. A planning committee, appointed by the President, met on two occasions and its program committee is well underway in developing an interesting and informative program. The Congress will be held in Nashville on October 12-13 at the Hermitage Hotel.

Although a meeting of the total committee had not occurred, some of its members had been active in the area of mental health. A series of conferences on practical office psychiatry had continued at the Uni-

versity of Tennessee Memorial Research Center, in Knoxville, under a grant from the NIMH, organized and led by Dr. James Burdette. Dr. Nat Winston, Commissioner of Mental Health, made significant contributions to the total Mental Health Program in Tennessee through the completion of plans for two units for the emotionally disturbed child (Chattanooga and Memphis), with construction soon to begin; his involvement in the development of at least four comprehensive mental health centers and his excellent leadership in the areas of implementation of the new mental health law. Interest in mental health in Memphis and Shelby County is at an all-time high level, with important contributions from the Department of Psychiatry under Dr. G. H. Aivazian and the staff of the Tennessee Psychiatric Hospital and Institute.

A member of a Committee of the Council on Mental Health of the AMA, the Chairman stated that the aim of the Committee is to visualize mental health as a part of the total health program rather than a single activity, and that recommendations would be made by the Council on Mental Health to the Board of Trustees of AMA that would be in keeping with AMA's interest in assisting the physician in fulfilling his obligation for the total care of his patient.

Activities of the Chairman included attending meetings of the AMA, the Council of Governors on Community Mental Health Centers, the 12th Annual Meeting of Mental Health Representatives of State Medical Associations, and the 5th Colloquim for Postgraduate Teaching Psychiatry.

The Committee recommended that the TMA continue its support of the American Medical Association's statement of "Principles on Mental Health". This statement obligates the physician to recognize mental illness as America's most pressing and complex health problem.

#### Report of Health Project Contest Committee

LAWRENCE L. COHEN, M.D., Chairman

The 13th Annual Health Project Contest, sponsored by TMA and the Woman's Auxiliary, received a total of 43 well designed

and executed entries from schools across the State. The awards totaling \$1,150 were presented to five winners:

**First Place:** Grundy County High School, Biology Class, Tracy City "Alcohol and Youth"—\$500

**Second Place:** Hamilton High School, Senior English Class, Memphis "Personal Health"—\$300

**Third Place:** Sherwood Junior High School, General Science Club, Memphis "Breakfast for Better Grades"—\$200

**Fourth Place:** Central High School, Biology Class, Knoxville "Alcoholism"—\$150

**Fifth Place:** Sherwood Junior High School, General Science Class, Memphis "Smoking in Sherwood Junior High"—\$100

Again in 1965, the Tennessee Department of Education was most cooperative in promoting the Health Project Contest. "Stimulation of good health practices, as well as an awareness of the value of good health, are the most important accomplishments of TMA's Health Project Contest".

#### Report of Committee on Sight Conservation

I. LEE ARNOLD, M.D., Chairman

**Glaucoma**—The Committee recommended that the internists, general practitioners and other physicians in the State of Tennessee seeing a large number of elderly patients be instructed to secure a suitable Schiotz or Berens Tolman tonometer and record the intraocular pressure on all patients over forty. Patients with a pressure reading greater than a level, such as 25 millimeters of mercury, should be referred to Ophthalmologists for further study. The medical schools in Tennessee should be instructed to teach the medical students, interns and other physicians in resident training the importance of this test as part of good medical practice.

**Amblyopia**—The Committee recommended that the Tennessee Medical Association support all screening programs for amblyopia presently conducted in the State of Tennessee such as that conducted under the "Head-start Program" in Nashville, and under the jurisdiction of the Shelby County Health Department and the American Red Cross in Memphis in cooperation with the Parent-Teachers Association.

**Autopsy Permit to Allow Enucleation of the Eyes**—It was recommended that permits be so written, or a special form used, making it perfectly clear from a legal standpoint as to the permission to enucleate the eyes in an autopsy.

#### Report of the Tennessee Committee for the American Medical Education and Research Foundation

DAVID S. CARROLL, M.D., Chairman

At present, there are six specific programs in operation: Funds for Medical Schools; Medical Education Loan Guarantee Program; Categorical Research Grants; Fellowship Program in Medical Journalism; Institute for Biomedical Research; and Committee for Research on Tobacco and Health.

During 1965, contributions from physicians, their families and friends, for the Funds for Medical Schools program totaled \$1,133,583.29. From these contributions, Tennessee's three medical schools will receive a total of \$32,817.90. Allocations for the three schools are: University of Tennessee College of Medicine, \$15,097.27; Vanderbilt University School of Medicine, \$11,797.19; Meharry Medical College, \$5,923.44.

The Foundation's Loan Guarantee Program extended an average of 685 loans per month to medical students, interns and residents in 1965. A total of 8,213 loans worth \$9,573,050 in principal amount were made for the year, and represented an eleven percent increase from the number granted in 1964. AMA-ERF granted 509 loans in Tennessee totaling \$569,900.

The Committee congratulated the Woman's Auxiliary to TMA for their work which has earned national recognition annually. During the past year the Auxiliary was honored with an award for the most money contributed among Auxiliaries in the same membership category as Tennessee. \$20,831.38 was contributed to AMA-ERF by the Auxiliary.

Contributions to AMA-ERF by physicians is tax deductible. All operational costs of the Foundation are borne by the AMA and each dollar contributed is put to work. The Committee urged TMA members to support the American Medical Association's Education and Research Foundation with a contribution in 1966.

#### Report of Interprofessional Liaison Committee

WM. H. EDWARDS, M.D., Chairman

In April, 1965, the House of Delegates rec-

ommended to the Interprofessional Liaison Committee that the Committee expand its activities into the realm of further contact with professional groups such as attorneys, bankers, engineers and dentists. Communication was initiated by the Committee to interest the attorneys of the State to meet with the medical profession and suggested that the Bar Association set the time and date with subject matters to be arranged prior to the meeting. Arrangements failed within the Bar's Interprofessional Code Committee and the meeting was not held, however, additional attempts may be made to arrange for such a meeting.

In September, 1965, the Committee met with the Professional Nursing Practice Committee of the Tennessee Nurses Association to discuss and explore matters of common interest to the medical profession and nursing profession. Discussion centered about dependent areas of medical care between the physician and the nurse, and it was felt by the Nursing Practice Committee that they would like a joint policy statement to be forthcoming from the medical association, particularly regarding the legal implications for nurses in certain areas where responsibilities were delegated by the physician to the nurse.

The report outlined recommendations of the Medical Society of the State of New York, the New York State Nurses Association, and the Hospital Association of New York State in an attempt to solve problems related to medical and nursing practice:

"That there be established in each hospital an advisory committee composed of representatives of administration, nursing, and the medical profession. It was agreed that problems arising from within the area of joint functioning could best be solved through joint study, and collaborative effort. It was further agreed that joint statements by the three state organizations, setting forth general guidelines on questionable areas of practice, i.e. closed chest cardiac resuscitation and its relation to the nurse; administration of intravenous drugs, and administration of anesthetics during labor, would be helpful to the local hospital or agency. It was further agreed that the ultimate decision as to the role and responsibility of the doctor and the nurse in carrying out certain procedures in a hospital or agency, rest with a decision making group of that individual hospital or agency. Further, it was recommended that to assist hospital and agencies in solving problems that

each hospital appoint an advisory committee composed of representatives of administration, nursing, and medical profession and that such a committee could then delve into the local problems as related to the three groups."

The TMA Committee felt that the formation of such local committees would be beneficial both to the profession, to the hospital administrators, and to the nursing profession and that steps might be undertaken to promote better understanding between the groups.

#### Report of Committee on Youth and Education

BEN D. HALL, M.D., Chairman

"The Committee on Youth and Education is basically a standby committee for the purpose of acting upon any matters referred to it. Requests for action during the year were minimal and of such nature as not to require a formal meeting." The Committee recommended that it be continued on a standby basis.

#### Report of Committee on Medicine and Religion

T. G. PENNINGTON, M.D., Chairman

The purpose of the Committee on Medicine and Religion has been to encourage a closer working relationship between doctors and ministers at the grassroots level for patient care. Approximately one-half of the county medical societies in Tennessee now have functioning committees and positive efforts were made to keep in contact with the local committees during the year.

"It is essential that the basic goals of this Committee be kept in mind. This is a strictly non-denominational committee which supports the Protestant, Jewish and Catholic faiths and we have no set policies insofar as religious beliefs are concerned but feel that our Committee is limited only by operating within the usual limitations of medical ethics. In fact, we have purposely followed no set religious pattern but have simply attempted to encourage a closer relationship between the various ministers of different faiths and physicians. The overall goal, of course, is the patient's benefit."

In the opinion of the Chairman, the work of the Committee has been highly successful. This is due to the diligent work of the committee members and to the fact that there seems to be a great interest across the State in work of this type.

Although the Committee placed major emphasis on the organization of the various

county committees and in speaking before medical societies in order to encourage meetings between physicians and ministers, its activities were numerous during the year. In order to better train people for their work, three members of the Committee attended the AMA meeting in Atlanta in May. One member was active in organizing a national conference on medicine and religion at Lake Junaluska, N.C. last July. In October, the Committee sponsored an all-day workshop on medicine and religion in Nashville and approximately 35 persons attended. The purpose of the meeting was to show to the county committee chairmen the variety of programs that could be presented. It seemed to be the opinion of all who attended that the meeting was successful.

The Chairman felt that the Committee on Medicine and Religion is accomplishing its purpose of creating a closer relationship between ministers and physicians for patient care.

#### Report of Committee on Rehabilitation

JAMES C. GARDNER, M.D., Chairman

The TMA Committee was established at the suggestion of the Committee on Rehabilitation of the AMA and is composed of six members, all of whom are members of the Professional Advisory Committee of the State Division of Vocational Rehabilitation. The Advisory Committee actively participates in the development of policy for the Vocational Rehabilitation Agency in its operational program relating to all phases of physical restoration and further advises the Division in other program areas that relate to extent of impairment of function with respect to various disabling conditions.

The program of rehabilitation services encompasses considerably more than physical restoration services including counseling and guidance, vocational training, placement into employment, and other services. However, inasmuch as a large part of the Division's activities are concerned with medical diagnosis; medical, surgical and psychiatric treatment; physical and occupational therapy; hospitalization; prosthetic

appliances; and in a limited way drugs and medical supplies, there is now and has been for many years an intimate relationship between the Agency and the medical profession of Tennessee.

All members of the TMA Committee on Rehabilitation attended the last meeting of the Professional Advisory Committee in August, 1965. At this time, the operations of the Division for the fiscal year 1964-65 were considered in detail. Due to a continuous expanding program from year to year this particular meeting required two and one-half days to complete the business at hand, review the operations for this year, and to make the necessary recommendations for a still expanding program for 1965-66. One matter of prime interest was a complete revision to the fee schedule upgrading fees for examinations, surgical fees, laboratory fees, radiological fees, fees for treatment, and fees for anesthesia. At present the fee schedules for the Tennessee Division of Vocational Rehabilitation are the highest in the Southeastern United States.

Among the expanding activities of the Division just getting under way are: An intensive treatment-rehabilitation program for juvenile offenders at Jordonia. A co-operative effort between the Department of Public Welfare and the Division of Vocational Rehabilitation to provide rehabilitation services to disabled welfare patients. A statewide system of occupational training centers for the mentally retarded and the physically handicapped. Another agreement is with the State Selective Service System to serve draft rejectees.

The Committee reported the relationship between the State Division of Vocational Rehabilitation and the medical profession to be good and the rehabilitation program to be doing a creditable job.

#### Special Committees Not Reporting

1. Committee on Disaster Medical Care
2. Liaison Committee to United Mine Workers of America

**The reports of special committees were referred to Reference Committee (B) on Reports of Special Committees.**

## SPECIAL REPORTS

### Report of the Committee on Relationships Between Doctors and Medicine and Osteopathic Physicians

FRANCIS H. COLE, M.D., Chairman

The House of Delegates in 1965, directed the President to appoint a committee of five physicians to draft a resolution suggesting legislation, looking to a closer working relationship between Doctors of Medicine and Osteopathic Physicians, through a procedure of licensure by a consolidated board. The special Committee met twice with eight members of the Tennessee Osteopathic Association in attendance. The joint committee studied the relationships between Doctors of Medicine and Osteopathic Physicians in this State, and through correspondence with approximately 20 other states. In the states which have granted to Osteopathic Physicians the right to practice medicine and surgery without limitation (as in Tennessee), it appears advantageous to have all Osteopathic Physicians and Doctors of Medicine licensed by the same Board and after being subjected to the same exact examination. The Committee recommended:

"that the House of Delegates authorize the Committee on Relationships Between Osteopathic Physicians and Doctors of Medicine, and representatives of the Legislative Committee, together with legal counsel of TMA, to consult with similar representatives from the Tennessee Osteopathic Association and jointly to draw a proposed bill to replace the present Board of Medical Examiners and the present Board of Osteopathic Examiners with a single composite Board comprising representation from both groups. The composite Board would thenceforth serve to license Osteopathic Physicians and Doctors of Medicine in Tennessee under the same procedure. By taking such action, it should be made clear that no change is contemplated in the Basic Science Board or the Healing Arts Board."

### Report of Woman's Auxiliary to Tennessee Medical Association

MRS. DONALD H. BRADLEY, President

The President and President Elect presented an information program over the State on the activities of the TMA Auxili-

ary, stressing the importance of the role of the physician's wife as his public relations agent to the people of the community.

An effort to strengthen membership resulted in a total of 1,473 Auxiliary members with 27 of that number, Members-at-Large, and one new Society in Wilson County.

For the past few years the Tennessee Auxiliary has, on a national level, taken top awards for contributions to the AMA-ERF, and again this year received an award for the most contributed among Auxiliaries in the same membership category, with an all-time high contribution of \$20,831.38. On the state level of contributions to the TMA-SEF, nine auxiliaries reported giving a total of \$130.

Through the assistance and cooperation of the Health Careers Council of the Tennessee Hospital Education and Research Foundation, Health Careers was a very active program throughout the state. Chairmen of local auxiliaries presented films, gave lectures, conducted tours of hospitals, distributed pamphlets explaining the different fields of medicine, and distributed book racks and posters in an effort to stimulate young minds of those interested in Health Careers.

Other effective programs carried out by the Auxiliary were: Disaster Preparedness; Community Service; Legislation; Safety; Senior Citizens; Rural Health; Mental Health; and International Health. A total of 200 Girl Scouts completed the training program under Good Emergency Mother Substitutes and over 6,000 pounds of drug samples were collected under the International Health Program. Opportunities to extend hospitality and offer assistance to the foreign student or Doctor of Medicine and their families received priority concern in the metropolitan areas.

"Dreams are the yeast of living." I have had the realization of some pleasant experiences as President of the Woman's Auxiliary this past year that I had never dreamed would happen to me. As men and women dedicated to the advancement of medicine, we have been stunned by some shocking legislation pertaining to our efforts, that has left each one of us saddened for the future of medicine in our state and country. Thus, some of our dreams may have been shattered a bit in the past year. But let us not stop dreaming dreams of a bright and happy future for ourselves and

that of our children—for as long as there is a breath of life there is hope."

### Report of AMA Delegation

BLAND W. CANNON, M.D., Chairman

Due to the seriousness of problems confronting medicine, it was necessary to convene the House of Delegates of AMA for four sessions during the year.

**Special Session—February 6-7, 1965:** At the first special session, Eldercare, a voluntary health insurance plan for the aged, was proposed to the Nation by AMA as "a plan better than Medicare". The AMA House in this session opposed the Medicare Bill and all similar types of bills and authorized the Board of Trustees to direct the public education program with the details involved with the Eldercare proposal that was before the Congress.

**Annual Session—June 20-24, 1965:** Federal health care legislation, the report of the President's Commission on Heart Disease, Cancer and Stroke, the Gundersen Committee report on organization of the House of Delegates, were among the major subjects acted upon by the House of Delegates at the AMA's 114th annual convention in New York City. Final registration figures reached a total of 64,517, including 24,268 physicians, the largest physician registration in AMA's history.

Tennessee delegates presented one of seven resolutions dealing with the President's Commission on Heart Disease, Cancer and Stroke. The resolution called for continued action by AMA on this issue.

Resolution No. 57, introduced by the Tennessee delegation, called for AMA to urge those branches of federal government involved in the formulation, enactment, and implementation of legislation concerning medical care, to seek the advice of AMA to the end that the public's health and the quality of care will not be impaired by legislation. The resolution also called upon AMA to keep members of its component medical societies informed of developments in legislation. The Reference Committee was in complete accord with the resolution and it was so approved.

The most controversial issue before the House was that of non-participation under the Medicare Law. The House recommended that "the members of AMA be reminded that it is each individual physician's obligation to decide for himself whether the conditions of a case for which he is about to accept responsibility permit him to provide his own highest quality of medical care." The House declared that "the physicians of the United States of America pledge themselves to continue their activity, in whatever social envi-

ronment may develop, to secure or to restore the freedom, high quality and availability of medical care which has been traditional in our Country."

**Second Special Session—Oct. 2-3, 1965:** The AMA House of Delegates met in a second special session of the year to discuss Medicare. Preceding the special session of the House, a national orientation conference was conducted on Public Law 89-97. Forty-three resolutions were presented and the Reference Committees heard one hundred and twenty-five witnesses speak to twenty separate subjects. These included (1) Physician-patient relationship; (2) Principles of Medical Ethics; (3) Regulations under P.L. 89-97; (4) Certification by physicians; (5) Blue Shield as an intermediary; (6) Reasonable fees; (7) Utilization Review Committees; (8) Compensation for medical services; (9) Separation of professional fees and hospital charges.

**19th Clinical Session—Nov. 28-Dec. 1, 1965:** The House reaffirmed its support of the "usual and customary" fee concept as the basic for reimbursing physician participants at all levels in government programs. It also urged "the individual physician's usual and customary fee concept to all third parties." The House in acting on the report of the new "prevailing fees" program of the National Association of Blue Shield Plans, recommended: "That the concept of the prevailing fees program of the NABSP be noted as one of the methods of compensation in those regions where the prevailing fees program is approved by the local or state medical society."

The House took a number of actions with regard to federal health care laws passed in 1965, such as Medicare and the Heart Disease, Cancer and Stroke Amendments. These actions included:

—That AMA immediately seek remedial action to delete the requirement in P.L. 89-97 that a patient be hospitalized to establish eligibility for nursing home care . . . That the AMA immediately seek remedial action to amend P.L. 89-97, Part B, Title XVIII, by deleting the word "receipted" from Section 1842, and substituting "such payment will be made on the basis of a method of payment so arranged to preserve and continue the professions current practice of billing" . . . That the AMA recommend that the Department of Health, Education and Welfare establish that an agreement for payment between the patient and physician constitutes valid evidence of services ren-

dered . . . Endorsed a recommendation that state and county medical societies be urged to assume leadership in the establishment of local advisory committees under the Heart Disease, Cancer and Stroke Amendments.

The House approved TMA's resolution calling for continued efforts through all appropriate channels to achieve the separation of billing and payments for professional fees from hospital charges under insurance contracts written by the health insurance industry. The resolution called for the House to urge the American Hospital Association to assist the hospitals of the U.S. to establish a system of uniform cost accounting and billing. The resolution also pointed out that in the administration of Public Law 89-97, which places hospital-based specialists under Part B of the Law, it will be necessary to change many insurance contracts now in existence.

The report pointed out that a summary of the proceedings of the House is published in the JAMA, AMA NEWS and abstracted in the TMA Journal and each delegate was urged to study these reports as they occur, since the policies and programs discussed and adopted touch every practicing physician regardless of his specialty.

#### **Report of Board of Directors of TMA Student Education Fund**

ROBERT M. FOOTE, M.D., Secretary

The Board of Directors of the Tennessee Medical Association Student Education Fund meets semi-annually and to date has had a total of twenty-two medical students who are receiving or have received loans granted, totaling \$35,200. The maximum of \$2,000 for a first year medical student and \$1,000 for any subsequent year has been adhered to, and all recipients are residents of Tennessee though they are enrolled in various medical schools throughout the country.

The report emphasized the benefits of the fund; the excellent public relations, the minimization of the necessity for financial affluence in order to attend medical school; and the reflection of the obvious concern of the physicians of the State of Tennessee for the future of medical education. Since the loan fund is constantly depleted due to the need for this type of financial aid, it was requested that individual contributions to the fund be encouraged whenever possible, and that the House of Delegates and the Board

of Trustees consider making more funds available for this work if and when possible.

**The special reports were referred to Reference Committee (B) on Reports of Special Committees.**

#### **Election of Physician of the Year**

**DR. LEONARD WRIGHT EDWARDS**, Nashville, was named **Outstanding Physician of the Year in Tennessee for 1966**.

#### **Announcements**

The Speaker called attention to the locations where the Reference Committees would meet and urged all members of the House to appear before the respective Reference Committee to present their views concerning any of the reports and resolutions.

There being no further business, the first session of the House of Delegates recessed at 5:25 p.m. until 9:00 A.M., Tuesday, April 19, 1966.

## **Tuesday Morning Session April 19, 1966**

The House of Delegates reconvened at 9:00 A.M. in the Civic Center Auditorium, Gatlinburg, with Dr. J. Malcolm Aste, Speaker of the House, presiding.

Dr. Thomas K. Ballard, Jackson, Chairman of the Credentials Committee, reported a quorum of registered delegates present.

#### **Introduction of Guests**

The Speaker introduced Mrs. C. C. Long of Ozark, Arkansas, First Vice-President of the Auxiliary to the American Medical Association.

#### **Report of Nominating Committee and Election of Officers**

J. O. WILLIAMS, JR., M.D., Chairman

**President-Elect—K. M. Kressenberg, Pulaski**

**Speaker—House of Delegates—Tom E. Nesbitt, Nashville**

**Vice-Speaker—House of Delegates**—R. L. DeSaussure, Memphis  
**Vice-President (East Tennessee)**—Roy L. McDonald, Oneida  
**Vice-President (Middle Tennessee)**—B. K. Hibbett, III, Nashville  
**Vice-President (West Tennessee)**—Wm. T. Satterfield, Memphis  
**Secretary**—Robert M. Finks, Nashville  
**AMA Delegate (East Tennessee)**—Wm. J. Sheridan, Chattanooga (December, 1966)  
**AMA Alternate Delegate (East Tennessee)**  
 —John H. Burkhart, Knoxville (December, 1966)  
**AMA Delegate (East Tennessee)**—John H. Burkhart, Knoxville (1967-69)  
**AMA Alternate Delegate (East Tennessee)**  
 —Harmon L. Monroe, Erwin (1967-69)

**TRUSTEES:**

East Tennessee—Thomas J. Ellis, Johnson City (1969)  
 Middle Tennessee—Charles A. Trahern, Clarksville (1969)  
 West Tennessee—Oscar M. McCallum, Henderson (1969)  
 West Tennessee—Francis H. Cole, Memphis (1969)

**COUNCILORS:**

First District—J. J. Range, Johnson City (1968)  
 Third District—Edward G. Johnson, Chattanooga (1968)  
 Fifth District—John S. Derryberry, Shelbyville (1968)  
 Seventh District—Carson E. Taylor, Lawrenceburg (1968)  
 Ninth District—Byron O. Garner, Union City (1968)  
 Tenth District—B. G. Mitchell, Memphis (1967)

**Nominees for Public Health Council:** (One from each Grand Division to be subsequently appointed by the Governor)

East Tennessee —John W. Adams, Chattanooga  
 Charles J. Wells, Elizabethton  
 James A. Burdette, Knoxville  
 West Tennessee —J. Kelley Avery, Union City  
 Leland M. Johnston, Jackson  
 Otis S. Warr, Memphis  
 Middle Tennessee—O. Morse Kochtitzky, Nashville  
 W. G. Lyle, Clarksville  
 J. L. Willoughby, Franklin

**Nominees for Board of Trustees of the State Tuberculosis Hospitals:** (Middle Tennessee—One to be appointed by the Governor)  
 H. R. Anderson, Nashville  
 Geo. R. Mayfield, Jr., Columbia  
 Dawson W. Durrett, Clarksville  
**Nominees for Board of Directors—Tennessee Hospital Association:**  
 R. Van Fletcher, Chattanooga  
 George W. Shelton, Chattanooga  
 Robert W. Myers, Chattanooga  
 George G. Young, Chattanooga  
 O. B. Murray, Chattanooga

The House voted upon the nominees individually and in each instance, the Speaker called for additional nominations from the floor. There were no nominations from the floor and all nominees submitted by the Committee were elected by the House of Delegates.

The report of the Nominating Committee was adopted as a whole.

**Report of Reference Committee on Amendments to Constitution and By-Laws**

JOHN H. BURKHART, M.D., Chairman

The Reference Committee considers all proposed amendments to both the Constitution and the By-Laws. Under the required waiting period, all Constitutional amendments introduced in 1966 will be presented for action by the House of Delegates in 1967. Amendments shown here are in the form in which they were approved, rejected, amended or deferred for action by the House of Delegates. New language is shown in black-faced type.

**Amendment to Constitution—No. I**

Amend Article VIII, Section 2 of the Constitution, by deleting the words, "and no Trustee shall be eligible immediately to succeed himself" and substituting the words, "and shall hold office for not more than two consecutive three-year terms"; and by inserting the sentence, "A Trustee elected to complete an unexpired term shall be eligible for two additional terms." Section 2 of Article VIII would then read:

"The elected Trustees shall serve for a period of three years, and shall hold office for not more than two consecutive three-year terms. A Trustee elected to complete an unexpired term shall be eligible for two additional terms. The Board of Trustees will organize by the election of a Chairman, and a Treasurer from the six elected as Trustees."

**The Reference Committee recommended that Amendment No. 1 to the Constitution not be adopted since this would offer the opportunity for the perpetuating of an individual in this office for a number of years inconsistent with the present policy of rotation of individuals through other offices in the Society.**

**TO BE ACTED UPON BY THE HOUSE OF DELEGATES IN THE NEXT REGULAR SESSION IN 1967.**

**Amendment to By-Laws—No. 1**

Amend Chapter II, Section 1, Paragraph 1 of the By-Laws by deleting the words, "beginning on Monday preceding the second Tuesday," and by inserting the words, "on the dates" following "in April" and preceding "and at such place." Amend Chapter II, Section 1, Paragraph 2 by deleting the last sentence, and combining Paragraphs 2 and 3. Section 1 of Chapter II would then read:

"The Association shall hold an Annual Meeting in April, **on the dates** and at such place as has been fixed by the Board of Trustees, but it is agreed that the meetings shall rotate annually to Middle, West, and East Tennessee if possible. "The House of Delegates shall meet annually at the place of the Annual Meeting of the Association. If the business interests of the Association require, it may meet in advance of or remain in session after the final adjournment of the general meeting, such extraordinary sessions being subject to the call of the Speaker of the House of Delegates."

**The Reference Committee recommended adoption of Amendment No. 1 to the By-Laws.**

**ACTION: ADOPTED**

**Amendment to By-Laws—No. 2**

Amend Chapter IV, Section 1 of the By-Laws by deleting the second sentence. Section 1 would then read:

"The House of Delegates shall meet annually at the time and place of the Annual Meeting of the Association. If the business interests of the Association require, it may meet in advance of or remain in session after the final adjournment of the General Meeting, such extraordinary sessions being subject to the call of the Speaker of the House of Delegates."

**The Reference Committee recommended**

**adoption of Amendment No. 2 to the By-Laws.**

**ACTION: ADOPTED**

**Amendment to By-Laws—No. 3**

Amend Chapter V, Section 3 of the By-Laws by inserting the word "second" following the words, "shall be the first order of business of the" and preceding "session of the House of Delegates"; by placing a period after "Delegates"; and by deleting the words, "on the morning of the second day of the General Meeting of the Association." Section 3 of Chapter V would then read:

"The report of the Nominating Committee and the election of officers shall be the first order of business of the **second** session of the House of Delegates."

**The Reference Committee recommended adoption of Amendment No. 3 to the By-Laws.**

**ACTION: ADOPTED**

**Amendment to By-Laws—No. 4**

Amend Chapter VII, Section 1 of the By-Laws by deleting the second sentence in entirety and substituting as the second sentence, "Following the election of Councilors in the second session of the House of Delegates, the Council shall meet for organization, and for the outlining of work for the ensuing year." Section 1 of Chapter VII would then read:

"The Council shall hold meetings during the Annual Meeting of the Association, and at such other times as necessity may require, subject to the call of the Chairman or on petition of three Councilors. **Following the election of Councilors in the second session of the House of Delegates, the Council shall meet for organization, and for the outlining of work for the ensuing year.** At this meeting it shall keep a permanent record of its proceedings. Five Councilors shall constitute a quorum."

**The Reference Committee recommended adoption of Amendment No. 4 to the By-Laws.**

**ACTION: ADOPTED**

**Amendment to By-Laws—No. 5**

Amend Chapter IV, Section 5 of the By-Laws by deleting the words, "and only first class transportation for alternate delegates once a year," and substituting the words,

"and the extent of payment of expenses to alternate delegates shall be determined by the Board of Trustees." Section 4 of Chapter IV would then read:

"It shall elect representatives to the House of Delegates of the American Medical Association in accordance with the Constitution and By-Laws of that body, for a period of two years, no two residing in the same grand division of the state, except when more than three delegates are authorized. The Association shall pay the expenses of each Delegate representing the Association at the American Medical Association meetings, and the extent of payment of expenses to alternate delegates shall be determined by the Board of Trustees."

**The Reference Committee recommended adoption of Amendment No. 5 to the By-Laws.**

#### ACTION: ADOPTED

##### Amendment to By-Laws—No. 6

Amend Chapter VIII, Section 18 of the By-Laws by deleting Paragraphs 3 and 4.

Section 18, Paragraph 3: "This Committee shall have a full-time Secretary who will be the Public Service Director and who shall be a member of the Central Office staff. He shall be responsible for the conduct of the activities of the Committee throughout the State and he will assist with the other field services of the Association."

Section 18, Paragraph 4: "The Public Service Director shall be employed or removed without assignment of cause by the Board of Trustees upon recommendation of the Communications and Public Service Committee. His salary shall be determined by the Board of Trustees."

**The Reference Committee recommended adoption of Amendment No. 6 to the By-Laws.**

#### ACTION: ADOPTED

##### Amendment to By-Laws—No. 7

Amend Chapter VI, Section 1 of the By-Laws by inserting two sentences: "In the event of his death, resignation, inability to serve or removal from office, the President-Elect shall succeed to the Presidency. Such a circumstance shall not prevent the President-Elect from then serving as President during the term for which he was originally elected, unless he has been required to serve more than three-quarters of his predecessor's Term." Amend Chapter VI, Section 2 by deleting the second sentence in

entirety. Section 1 and Section 2 of Chapter VI would then read:

"The President, or his appointees, shall preside at all meetings of the Association. He shall appoint all members of Committees not otherwise provided for, shall deliver an Annual Address at such time as may be arranged, shall give a deciding vote in case of a tie, and shall perform such other duties as custom and parliamentary usage may require. He shall be the head of the profession of the State during his term of office, and, as far as practicable, shall visit, by invitation, the various component societies and assist the Councilors in building up these societies and in making their work more practical and useful. In the event of his death, resignation, inability to serve, or removal from office, the President-Elect shall succeed to the Presidency. Such a circumstance shall not prevent the President-Elect from then serving as President during the term for which he was originally elected, unless he has been required to serve more than three-quarters of his predecessor's term. The retiring President shall be ex-officio a member of the Board of Trustees for one year.

"The Vice-Presidents shall assist the President in the discharge of his duties, as requested by the President."

**The Reference Committee recommended that Amendment No. 7 to the By-Laws be amended by deleting the words, "unless he has been required to serve more than three-quarters of his predecessor's term." The Committee recommended adoption of Amendment No. 7 as amended.**

#### ACTION: AMENDMENT NO. 7 TO THE BY-LAWS WAS ADOPTED AS AMENDED BY THE REFERENCE COMMITTEE.

##### Amendment to By-Laws—No. 8

Amend Chapter VI of the By-Laws, Section 3, by deleting Sentence 3 which reads: "All funds shall be deposited in a State or National Bank." and substituting the following sentences: "All funds shall be deposited in a State or National Bank, Savings & Loan Association or invested in such mortgages, bonds, preferred or common stocks, or mutual funds, as are considered by the Board of Trustees as prudent men to be suitable for the purposes of the Tennessee Medical Association. The Board of Trustees shall direct its finance Committee to procure professional financial advice as is deemed necessary in the management of the funds of the Association." Amend Sen-

tence 4 by substituting the words, "The Treasurer" at the beginning of the sentence for the word, "He." Section 3 of Chapter VI would then read:

"The Treasurer shall give bond for the trust reposed in him, for such amount as the remaining members of the Board of Trustees may name, said bond to be made by a regular bonding company, and paid for by the Association. He shall demand and receive all funds due the Association, together with bequests and donations. **All funds shall be deposited in a State or National Bank, Savings & Loan Association or invested in such mortgages, bonds, preferred or common stocks, or mutual funds, as are considered by the Board of Trustees as prudent men to be suitable for the purposes of the Tennessee Medical Association.** The Board of Trustees shall direct its Finance Committee to procure professional financial advice as is deemed necessary in the management of the funds of the Association. The Treasurer shall pay money out of the treasury on bills certified to by him or the Executive Director of the Association only; he shall subject his accounts to such examination as the House of Delegates may order; he shall annually render an account of his acts and of the state of the funds in his hands.

**The Reference Committee believed that such a departure from present practices should be more thoroughly studied by the Board of Trustees and recommended that no action be taken by the House of Delegates at the present time.**

**ACTION: THE HOUSE OF DELEGATES ACCEPTED THE RECOMMENDATION OF THE REFERENCE COMMITTEE ON AMENDMENT NO. 8 TO THE BY-LAWS.**

**The report of the Reference Committee on Amendments to the Constitution and By-Laws was adopted as a whole.**

**REPORT OF REFERENCE COMMITTEE ON RESOLUTIONS**

WM. T. SATTERFIELD, M.D., Chairman

The Reference Committee on Resolutions has the option of recommending a resolution for adoption or rejection, for adoption as amended or substituted, or for no action. The Resolutions shown are in the form in which the House of Delegates **adopted** or **rejected** them.

**RESOLUTION NO. 1-66**

**Increase in Tennessee Medical Association Dues**

By: JOHN C. BURCH, M.D., Chairman,  
Board of Trustees & Treasurer

WHEREAS, at the regular quarterly meeting in October, 1965, the Board of Trustees after long study and examination of the facts, has found that the financial resources of the Association are not sufficient to conduct the programs, activities and responsibilities of the Association, and

WHEREAS, the Association is faced with the situation in which expenses are rising but income is not increasing, making it necessary to use reserves from previous years to bring the 1966 budget into balance, and

WHEREAS, Tennessee is currently one of the State Medical Associations in the Southeast and the United States with the lowest dues in the nation, and

WHEREAS, Medicine faces its time of greatest challenge, and has found it necessary to expand existing programs as well as to initiate additional activities, and the Tennessee Medical Association has taken appropriate steps to initiate the necessary action to meet many of these problems; now therefore be it

RESOLVED, that the Board of Trustees of the Tennessee Medical Association unanimously recommends and urges the House of Delegates to approve an increase in the Tennessee Medical Association's annual dues in the amount of \$15.00 per year per member, to become effective January 1, 1967, after which the annual TMA dues will be \$55.00 per member per year.

**The Reference Committee on Resolutions recommended adoption of Resolution No. 1-66.**

**ACTION: ADOPTED**

**RESOLUTION NO. 2-66**

**Revision of the Workmen's Compensation System**

By: HARMON L. MONROE, M.D., Chairman,  
Committee on Occupational Health

WHEREAS, the Workmen's Compensation program and laws began over fifty years ago for the sole purpose of aiding the **injured** worker to recover from his **injuries** and return to his job, and

WHEREAS, these laws have been amended from time to time with increased monetary benefits the prime consideration, and

WHEREAS, there is an ever increasing number of disease entities that are actually occupational in origin or are so declared by some of our courts, and

WHEREAS, impairment has become synonymous with disability in the minds of most people, professional as well as non-professional, so that a

rapidly increasing number of Workmen's Compensation claims are adversary litigations and are settled on a purely monetary basis, and physicians are caught up in the procedure with a feeling of frustration and disgust at the turn of events, and

WHEREAS, the employer is rapidly becoming more and more reluctant to employ a person with a known or detectable impairment because of the fear of litigation in the dim future arising as a result of aggravation, real or alleged, or a pre-existing impairment, and

WHEREAS, the healing arts professions, utilizing the knowledge and skills at hand and collaborating with the Division of Vocational Rehabilitation of the Department of Education, can prevent the vast majority of impairments becoming true disabilities, and

WHEREAS, we believe that creativity and productivity are not to be equated with freedom from physical abnormality or impairment and that burden should not be added to burden and we recognize that depriving citizens of the opportunity for self-support places a severe economic burden on the community, state and nation and creates an unwholesome familial and cultural pattern for oncoming generations, and

WHEREAS, we are dedicated to the philosophy that an individual should have the opportunity to be productive and self-sufficient, to the limit of his ability and desire; now therefore be it

RESOLVED, that the Legislative and Public Policy Committee of the Tennessee Medical Association prepare and present to the next General Assembly of the State of Tennessee a resolution requesting that the Legislative Council be directed to make a complete and detailed study of our present Workmen's Compensation system and make recommendations for new laws that would enable the employee and employer to receive the maximum benefits and productivity possible under our free-enterprise system.

**The Reference Committee on Resolutions recommended adoption of Resolution No. 2-66.**

**ACTION: ADOPTED**

**RESOLUTION NO. 3-66**

**Authority to the Group Insurance Committee to Change Either the Administrator or Insurance Company, or Both, in the Major Hospital (Medical) Group**

By: W.M. T. SATTERFIELD, M.D.

Chairman, Group Insurance Committee

*(An amendment recommended by the Reference Committee and included in the following resolution, is shown in black-faced type.)*

WHEREAS, nationally and in Tennessee, there have been, and are impending, benefit changes

and rate changes covering Major Hospital (Medical) groups, and

WHEREAS, any changes in the present TMA Group will probably not be known until sixty days before the renewal of the contract on September 1st, and

WHEREAS, no change of either Administrator or Insurance Carrier would be made without protection of present members' coverages, and

WHEREAS, to protect members' interests and to obtain the best benefits and rates available, it may be necessary to make a new contract or to change Administrator or Insurance Company, or both, before the next meeting of this House of Delegates; now therefore be it

RESOLVED, by the House of Delegates of the Tennessee Medical Association that its Group Insurance Committee in consultation with the Executive Committee of the Board of Trustees be given authority to change Administrator or Insurance Carrier, or both of the TMA Group Major Hospital (Medical), provided that the Committee protects the interests of the present members covered in any change.

**The Reference Committee recommended adoption of Resolution No. 3-66 as amended.**

**ACTION: ADOPTED AS AMENDED**

**RESOLUTION NO. 4-66**

**Health Programs for Medically Indigent in Tennessee**

By: JOHN H. BURKHART, M.D., President

*(An amendment, recommended by the Reference Committee and included in the following resolution, is shown in black-faced type.)*

WHEREAS, high quality health care for everyone is necessary and desirable, regardless of their ability to pay, and

WHEREAS, medical care of all persons in Tennessee is a matter of vital concern to physicians, and those persons who are unable to pay for medical care are the responsibility of all citizens, and

WHEREAS, medical care for these persons should be furnished through a program of general taxation, with the program being directed by medical personnel; now therefore be it

RESOLVED, that the Tennessee Medical Association in this session of the House of Delegates go on record favoring the full implementation of all programs that come under Title XIX of Public Law 89-97, with the medical services under Title XIX to be provided and administered by the State Government of Tennessee, and be it further

RESOLVED, that such medical services should be administered either by the Department of Public Health or its designated agency, and that the program be directed by a physician, and be it further

**RESOLVED**, that in any program established, the payment for physicians' services shall be included and that reimbursement to physicians for their services should be on a usual and customary fee basis, and be it further

**RESOLVED**, that the state plan be established and implemented at the earliest possible date.

**The Reference Committee recommended adoption of Resolution No. 4-66 as amended.**

**ACTION: ADOPTED AS AMENDED**

**RESOLUTION NO. 5-66**

**Licensing of Children to Operate Motorcycles**

By: B. G. MITCHELL, M.D.

Memphis-Shelby County Medical Society

WHEREAS, the riding of motorcycles and similar vehicles is considered extremely hazardous under modern traffic conditions, and

WHEREAS, the State of Tennessee is now licensing children between the ages of fourteen and sixteen years to operate such vehicles on the streets and highways of this state with the permission of the parents with a motor which produces more than five horsepower, and

WHEREAS, several manufacturers now produce such a motor-driven cycle capable of speeds in excess of fifty miles per hour, and

WHEREAS, statistical analysis of accidents in Memphis and Shelby County during 1965 reveals the startling fact that one vehicle out of every eight licensed in this category were involved in an accident in that calendar year, and

WHEREAS, of the three hundred sixty-six (366) accidents in which motor-driven cycles were involved in 1965 approximately one fourth said cycles were being operated by children under the age of 15 years. And in approximately sixty percent (60%) of all accidents the operator of the cycle was 19 years of age or younger, and

WHEREAS, manufacturers, both domestic and foreign, are producing motor-driven cycles at a higher rate and at a lower price, enabling many children to purchase such vehicles with parental consent, and

WHEREAS, the operation of such motor-driven cycles obviously requires skill and dexterity which these children cannot possibly attain; now therefore be it

**RESOLVED**, that the House of Delegates of the Tennessee Medical Association, in the interest of safety and health of these children, hereby respectfully requests the Governor of Tennessee to exert all possible influence of his office to eliminate the licensing of children under the age of sixteen years in the operation of motor-driven cycles, and be it further

**RESOLVED**, that the Department of Safety of the State of Tennessee study carefully the inci-

dence of crippling injuries and death in the operation of such vehicles by all young people under the age of twenty-one years for the purpose of corrective legislation.

**The Reference Committee on Resolutions recommended adoption of Resolution No. 5-66**

**ACTION: ADOPTED**

**RESOLUTION NO. 6-66**

**Title XIX—Social Security Amendments—1965**

By: MEMPHIS-SHELBY COUNTY DELEGATION

WHEREAS, Title XIX of the Social Security Amendments of 1965 requires that each state designate a single state agency to administer medical assistance provided under this title, and

WHEREAS, it is desirable that medical assistance programs be administered by medically trained and experienced personnel, and

WHEREAS, the Tennessee Department of Public Health is a medically administered agency and has the capability of expanding its professional staff as necessary to administer the medical assistance programs under Title XIX, and

WHEREAS, the Memphis and Shelby County Medical Society has taken action to designate the Tennessee Department of Public Health as the state agency to administer Title XIX of the Medicare Act, and to have similar action taken in the House of Delegates of the Tennessee Medical Association; now therefore be it

**RESOLVED**, that the Tennessee Medical Association recommends that the Tennessee Department of Public Health be designated as the agency of State Government to administer the medical assistance programs under Title XIX in Tennessee; and be it further

**RESOLVED**, that a copy of this Resolution be forwarded to the Governor of Tennessee.

**The Reference Committee on Resolutions recommended adoption of Resolution No. 6-66.**

**ACTION: ADOPTED**

**RESOLUTION NO. 7-66**

**Reaffirmation of Policy on Corporate Practice of Medicine**

By: THE COUNCIL, THE BOARD OF TRUSTEES OF THE TENNESSEE MEDICAL ASSOCIATION, THE TENNESSEE RADIOLOGICAL SOCIETY, THE TENNESSEE SOCIETY OF PATHOLOGISTS, AND THE TENNESSEE STATE SOCIETY OF ANESTHESIOLOGISTS

*(Amendments, recommended by the Reference Committee and included in the fol-*

*lowing resolution, are shown in black-faced type. The statement referred to as attached to the resolution may be obtained from the TMA Headquarters Office.)*

WHEREAS, The Tennessee Medical Association has heretofore adopted the policy that compensation of a physician by a hospital on a salary or percentage basis is unethical, such policy being outlined in the attached "Statement on the Relationships between Physicians and Hospitals and the Corporate Practice of Medicine"; and

WHEREAS, the Association is advised that such method of compensation is illegal as well as unethical; and

WHEREAS, such expressions of policy by the Tennessee Medical Association are in conformity with long-established policy of the American Medical Association and have been ratified and approved by The Tennessee Radiological Society, The Tennessee Society of Pathologists, and The Tennessee State Society of Anesthesiologists; now therefore be it

RESOLVED jointly by the Council, Board of Trustees, and House of Delegates of THE TENNESSEE MEDICAL ASSOCIATION and by THE TENNESSEE RADIOLOGICAL SOCIETY, THE TENNESSEE SOCIETY OF PATHOLOGISTS, and THE TENNESSEE STATE SOCIETY OF ANESTHESIOLOGISTS, that previous enunciations of policy by the Tennessee Medical Association as set forth in the attached Statement be, and they are hereby, ratified, approved and confirmed in the strongest possible terms; that the principles set forth in such expressions of policy be implemented to the fullest possible extent and as soon as practicable; that in the transition period during which contractual arrangements between physicians and hospitals are being revised in accordance with such policy the Council be permitted to approve such reasonable temporary measures **implemented on or before June 30, 1966, which are consistent with the principle that a corporation may not merchandise the services of a physician which are an integral part of a contract, which specifically provides for a full implementation of the above mentioned principles.**

The Reference Committee recommended adoption of Resolution No. 7-66 as amended.

#### ACTION: ADOPTED AS AMENDED

##### RESOLUTION NO. 8-66

##### To Discontinue Service Benefits Under the Tennessee Plan

By: B. K. HIBBETT, III, M.D., Chairman  
Committee on Health Insurance

WHEREAS, most health insurance plans have been greatly expanded, covering more benefits to the public than ever before, and

WHEREAS, present trends are such that government intervention in financing health care is playing a greater part in the economic life of all citizens to the end that federal and state funds are having a profound effect upon existing health insurance plans, and

WHEREAS, the broadening of medical knowledge and development of new techniques has resulted in advanced types of medical procedures that are being performed today, not known in previous years when many health insurance plans were originated, and

WHEREAS, the existing Tennessee Plan was established in 1949 and has basically continued since that time in its present format, and

WHEREAS, the Health Insurance Committee of the Tennessee Medical Association has intensively studied the effectiveness of the Tennessee Plan in this state during the past twelve months, and

WHEREAS, at a meeting of the Health Insurance Committee of the Tennessee Medical Association on March 27th, the Committee adopted action to recommend to the House of Delegates that major changes in the existing Tennessee Plan be made; now therefore be it

RESOLVED, that the service benefits aspect of the Tennessee Plan be discontinued, along with the riders of in-hospital medical care, anesthesia, and radiological services; and be it further

RESOLVED, that a deadline of May 1, 1967, be established as the date that this action be accomplished; and be it further

RESOLVED, that all underwriters of the Tennessee Plan be notified that upon the anniversary dates of any policies in effect, that revision be made so that all existing contracts now in effect will terminate not later than May 1, 1967; and be it further

RESOLVED, that all participating physician agreements with the Tennessee Medical Association terminate by May 1, 1967.

**The Reference Committee on Resolutions recommended adoption of Resolution No. 8-66.**

#### ACTION: ADOPTED

##### RESOLUTION NO. 9-66

##### Establishment of a Relative Value System

By: B. K. HIBBETT, III, M.D., Chairman  
Committee on Health Insurance

WHEREAS, the Health Insurance Committee, after much study, believes that to organize a broad comprehensive health insurance plan with non-service benefits, a relative value system is necessary, and

WHEREAS, in order to have some standardization over the State of Tennessee regarding the implementation of future health insurance plans, and

WHEREAS, to have some mechanism by which

insurance companies may work on health insurance plans, now therefore be it

**RESOLVED**, that the House of Delegates of the Tennessee Medical Association authorize the Health Insurance Committee to establish a relative value system for the State of Tennessee and submit this to the House of Delegates at a later date for their approval.

**Recommendation:** The Reference Committee commended the Health Insurance Committee for its efforts and recommended that it continue to study the development of a relative value system and submit it to the Board of Trustees for their consideration. **The Committee recommended that no action be taken on Resolution No. 9-66 at the present time.**

**ACTION: THE HOUSE OF DELEGATES APPROVED THE RECOMMENDATION OF THE REFERENCE COMMITTEE AND NO ACTION WAS TAKEN ON RESOLUTION NO. 9-66.**

#### RESOLUTION NO. 10-66

**Formation of a Comprehensive Health Insurance Plan With Reimbursements to Physicians Being Made According to the Usual and Customary Fees**

By: B. K. HIBBETT, III, M.D., Chairman  
Committee on Health Insurance

(*The Reference Committee recommended that Resolution No. 10-66 be amended by deleting the last Whereas and by deleting the words, "using the relative value system it is now working on," in the Resolve. These deletions have been made in the following resolution.*)

WHEREAS, the House of Delegates of the American Medical Association approved the usual and customary fee concept as the basis for reimbursing physicians participating in health programs financed with federal monies; and urged the individual physician to adopt the usual and customary fee concept to all third parties, and

WHEREAS, the Board of Trustees of the Tennessee Medical Association has adopted policy that all governmental programs, federal and state, and will so recommend to this House of Delegates, that physicians should be reimbursed according to the usual and customary fee within the community without reference to any existing payment schedule, and

WHEREAS, the House of Delegates of the Tennessee Medical Association, in April, 1965, directed the Health Insurance Committee to investigate, stimulate and help organize a broad more com-

prehensive service plan at the state level by correlating local plans, and

WHEREAS, the Health Insurance Committee has worked diligently to proceed toward establishing a broad more comprehensive service plan, now therefore be it

**RESOLVED**, that the House of Delegates authorize the Health Insurance Committee to set up a comprehensive health insurance (non-service) plan with reimbursements being made to physicians according to their usual and customary fees in their respective medical communities.

**The Reference Committee recommended adoption of Resolution No. 10-66 as amended.**

**ACTION: ADOPTED AS AMENDED BY REFERENCE COMMITTEE**

#### RESOLUTION NO. 11-66

**Reimbursement to Physicians for Services on Utilization Review Under P.L. 89-97**

By: WILLIAMSON COUNTY MEDICAL SOCIETY

WHEREAS, Public Law 89-97 of the 89th Congress has established a Health Insurance Program for the Aged and made provisions for certain other payments in the medical and paramedical fields, and

WHEREAS, Public Law 89-97 provides for the payment to any provider of services with respect to services for which payment may be made of reasonable cost of such services, and

WHEREAS, Section 1861 (j.) (8) and (k.) requires each hospital to have in effect a utilization review plan and defines such a plan, and

WHEREAS, the establishment of such a plan in a hospital without a resident house staff will necessarily place a heavy burden on two or more physicians in the community causing such physician members to lose valuable time that normally would be devoted to patient care; now therefore be it

**RESOLVED**, that reasonable compensation for the physician's time necessary for service on the Utilization Review Committee be defined as a legitimate charge against overhead operating cost of the hospital and, therefore, a part of "reasonable cost"; and be it further

**RESOLVED**, that a similar resolution be introduced in the House of Delegates of the American Medical Association's next annual meeting in June, 1966, for adoption as a part of our American Medical Association's policy.

**The Reference Committee on Resolutions recommended that Resolution No. 11-66 not be adopted.**

**ACTION: THE HOUSE APPROVED THE REFERENCE COMMITTEE RECOMMENDATION AND RESOLUTION NO. 11-66 WAS NOT ADOPTED.**

**RESOLUTION NO. 12-66**

**Re The University of Tennessee  
Medical School**

**By: MEMPHIS-SHELBY COUNTY DELEGATION**

WHEREAS, upon careful and considered study by the Liaison Committee of the Memphis and Shelby County Medical Society investigation has shown that the University of Tennessee Medical School is at present straining its facilities to remain accredited, and that the school urgently and immediately needs upgrading of the number of faculty, number and size of classrooms and laboratories, library facilities, and teaching equipment if the school is to continue as a quality medical school, and

WHEREAS, it is the duty of the local medical school administrators, the Board of Trustees and the President of the University of Tennessee, and the Governor of Tennessee to promote the improvement of the quality of the University Medical School; now therefore be it

RESOLVED, that the Memphis and Shelby County Medical Society recommends the allocation of sufficient funds as soon as possible to insure continued accreditation and advance a foundation for attainment of a quality medical school of commensurate stature with other medical schools; and be it further

RESOLVED, that this resolution be supported and adopted at this annual session by the Tennessee Medical Association's House of Delegates.

**The Reference Committee on Resolutions recommended adoption of Resolution No. 12-66.**

**ACTION: ADOPTED****RESOLUTION NO. 13-66****Charges for Handling Third Party Forms**

**By: NASHVILLE ACADEMY OF MEDICINE  
DELEGATION**

WHEREAS, third party forms, such as insurance forms, are requiring an ever-increasing amount of the physician's time and are involving significant clerical expense, and

WHEREAS, third party forms may be needed for hospital, medical, or surgical benefits; for medico-legal purposes; or for various forms of disability compensation; now therefore be it

RESOLVED, that all such forms or reports which are needed for medico-legal purposes or for disability compensation be filled out at a reasonable and customary charge to the patient, to the insurance company or to any other agency requesting information, and be it further

RESOLVED, that the initial form for hospital, medical or surgical benefits be filled out free of charge, but that all subsequent forms, where requested, be filled out at the patient's expense or

at third party expense at the discretion of the physician, and be it further

RESOLVED, that the Tennessee Medical Association endorse as ethical this concept of reasonable charges to patients and other parties for clerical services and that this resolution be distributed to the Health Insurance Council, to all insurance companies operating in Tennessee, to the Welfare Department, to the Public Health Department, and to the Division of Vocational Rehabilitation, and be it further

RESOLVED, that a similar resolution be introduced in the American Medical Association's House of Delegates at its next annual meeting in June, 1966, for adoption as a part of the American Medical Association's policy.

**The Reference Committee recommended that Resolution No. 13-66 not be adopted since it was believed that this is the responsibility of the individual physician.**

**ACTION: THE HOUSE OF DELEGATES APPROVED THE RECOMMENDATION OF THE REFERENCE COMMITTEE AND RESOLUTION NO. 13-66 WAS NOT ADOPTED.**

**RESOLUTION NO. 14-66****Professional Fees for Medicare and Other Government Sponsored Medical Plans**

**By: MEMPHIS-SHELBY COUNTY MEDICAL SOCIETY**

*(Amendments, recommended by the Reference Committee and included in the following resolution, are shown in blackfaced type.)*

WHEREAS, the physicians of the State of Tennessee are in agreement with the action of the House of Delegates of the American Medical Association, June, 1965—"It is recommended that when government assumes financial responsibility for an individual's health care, reimbursement for professional services should be on the same basis as in the case of other indispensable elements of health care. Therefore, reimbursement for the services of physicians participating in government sponsored programs should be on the basis of usual and customary fees," and

WHEREAS, the physicians of the State of Tennessee and several private insurance carriers in the state, who presently compensate physicians on the basis of usual and customary fees, have established that such programs are mutually advantageous to the patient, insurance carrier and physician, and the costs of such programs are reasonable and are less than insurance programs that provide fixed fees for service, and

WHEREAS, the P.L. 89-97 (Section 1842-D,

page 26) states that "the customary and reasonable fees" for physicians shall be paid for services rendered, and

WHEREAS, private insurance carriers serving as fiscal intermediaries for Part B of the Medicare Law for other states plan to pay the usual and customary fee for professional services rendered; now therefore be it

RESOLVED, that the Tennessee Medical Association hereby specifically endorses the action of the AMA to the effect that "it is recommended that when government assumes financial responsibility for an individual's health care, reimbursement for professional services should be on the same basis as in the case of other indispensable elements of health care. Therefore, reimbursement for the services of physicians participating in government supported programs should be on the basis of usual and customary fees," and be it further

RESOLVED, that the TMA directs constituent societies to establish Review Committees to determine whether a particular fee is usual, customary and reasonable when requested. If no such medical society committee exists in the area, a review committee of the Tennessee Medical Association will serve this function.

**The Reference Committee recommended adoption of Resolution No. 14-66 as amended.**

#### ACTION: ADOPTED AS AMENDED

##### RESOLUTION NO. 15-66

##### Home Health Service Under Medicare

By: HOME HEALTH SERVICE UNDER MEDICARE

WHEREAS, the Montgomery County Medical Society has become cognizant of the approach the Tennessee Department of Public Health has had to take to "home health services" under P.L. 89-97, Parts I-B and I-C and Tennessee State Law, and

WHEREAS, we decry a proposal that would further expand governmental control of medical services by one government agency rendering a fee to another government agency; the private patient only being a pawn in the process; and

WHEREAS, by utilizing funds received under this plan, the local health departments would be placed in a position of actively competing with other health agencies and hospitals for nurses to fulfill this program; and

WHEREAS, after due consideration and repeated deliberation, the Montgomery County Medical Society feels that the proposed plan for the participation of the Tennessee Department of Public Health and the local health departments in providing these services is basically undesirable; therefore be it

RESOLVED, that the Tennessee Medical Association encourage and stimulate the formation and operation of private nursing concerns which

would fulfill the criteria of a "home health agency" under P.L. 89-97; Part I-C; and be it further

RESOLVED, that copies of this resolution be sent to: (1) The Commissioner of Public Health of the State of Tennessee; (2) The Tennessee Nurses Association; and (3) that a similar resolution as this be introduced by the Tennessee Delegation in the June session of the House of Delegates of the American Medical Association.

**The Reference Committee on Resolutions recommended adoption of Resolution No. 15-66.**

#### ACTION: RESOLUTION NO. 15-66 WAS NOT ADOPTED BY THE HOUSE OF DELEGATES.

##### RESOLUTION NO. 16-66

##### H.R. 12937 Introduced in 89th Congress to Revise Existing Laws Relating to the Practice of Optometry in the District of Columbia

By: LEGISLATIVE COMMITTEE OF THE TENNESSEE ACADEMY OF OPHTHALMOLOGY

WHEREAS, the Bill H.R. 12937 has been introduced into the House of Representatives of the 89th Congress to revise the existing law relating to the practice of optometry in the District of Columbia; and

WHEREAS, this bill would re-define optometry to include other areas presently accepted as being part of the practice of medicine; and

WHEREAS, this bill would declare optometry to be a learned profession and attempt to place optometry on an equal par with medicine; and

WHEREAS, the definition of optometry as contained in this bill would prohibit and prevent all physicians' assistants, such as nurses, technicians and aids from performing their necessary duties, including visual acuity and visual field determinations, and other similar delegated tasks; and

WHEREAS, a provision of the bill, which would require an individual to secure from his physician a written prescription to replace a broken frame or duplicate a damaged lens, would serve no public good and would act only as a restraint of trade on Opticians (who dispense eyeglasses); and

WHEREAS, it is believed that this bill is sponsored by organized optometry on a national basis as a model for future attempts at similar legislation by optometry in the various states, and as a model to be used by various other paramedical groups (such as chiropractic and podiatry) in their attempts at legislating themselves into the practice of medicine; now therefore be it

RESOLVED, that the Tennessee Medical Association go on record as opposing the enactment of this bill; and be it further

RESOLVED, that copies of this resolution be forwarded by the Executive Secretary of this Association to all members of the Tennessee Congressional Delegation; and be it further

**RESOLVED**, that the Executive Secretary of this Association be directed to forward a copy of this resolution to the American Medical Association with the recommendation that all its influence be brought to bear to defeat this bill; and be it further

**RESOLVED**, that the Tennessee Delegation to the American Medical Association be instructed to introduce a resolution to this same effect in the House of Delegates of AMA in the annual session, June 1966; and be it further

**RESOLVED**, that if this bill is enacted, it should be modified in accordance with the proposals of the District of Columbia Medical Society which have been given in testimony before the House District Committee.

**The Reference Committee recommended adoption of Resolution No. 16-66.**

**ACTION: ADOPTED**

**The report of the Reference Committee on Resolutions was adopted, with the exception of the recommendation on Resolution No. 15-66.**

**REPORT OF REFERENCE COMMITTEE  
ON REPORTS OF OFFICERS**

ROBERT M. FINKS, M.D., Chairman

**Report of the President**

"This report reflects accurately the many stimulating challenges, duties and opportunities incumbent in the office of President of this Association and that Dr. Burkhardt has met these well as obvious from this report. It is a report of progress for our Association and at the same time, it is a challenge for us to rally from the depths of despair that resulted from the adoption of the Medicare program. It is an effort to mobilize the profession to combat further socialization. The Reference Committee on Reports of Officers moves that Dr. Burkhardt's report be adopted with commendation for a job well done."

**ACTION: ADOPTED**

**Report of the Secretary**

"The Secretary's report in reality is a report of the duties assigned to one member of the Board of Trustees and reflects some of the duties of the Trustees. Being a member of the Board of Trustees is a primary function of the Secretary. It is recommended that this report be adopted and it is so moved."

**ACTION: ADOPTED**

**Report of the Board of Trustees**

"The report of the Board of Trustees reflects a tremendous volume of work, time and dedicated

effort expended by this capable group of Officers in behalf of organized medicine, the public welfare and the individual practitioner of medicine. The variety and complexity of problems resolved by the Trustees continues to increase and we are most fortunate to have this very talented group of Trustees. Their work as outlined in this report is commended. Your Reference Committee concurs and recommends adoption by the House of Delegates of the policy statement of the Board of Trustees contained in the report of the Board. The recommendation of the Board calls for the House to adopt this policy by the Tennessee Medical Association, that all governmental programs, federal and state, reimburse physicians according to the usual and customary fee within the community without reference to any existing payment schedule as a basis. This applies to Public Law 89-97 (Medicare). It also would be TMA's policy in any program of health care financed through federal funds. It should be particularly emphasized that this also would apply to the Dependents' Medical Care Program contract which TMA now participates in with the Department of Defense. Any new contract or arrangement for this program should follow the policy statement and the Reference Committee strongly recommends adoption of this statement to the House of Delegates. Your Committee recommends the adoption of the Report of the Board of Trustees."

**ACTION: ADOPTED**

**Report of the Treasurer**

"The Treasurer's report accurately reflects the financial position of your Association and the need for an increase in dues to meet the rising cost of running this Association. We strongly encourage adoption of this resolution for an increase in dues. The report is approved as submitted and we would like to move its adoption."

**ACTION: ADOPTED**

**Report of the Council**

"This report of the Council is one of the most significant and important reports presented to this House of Delegates. It is a sound reasoned report that meets firmly and unequivocably the problem of corporate practice of medicine. The Council's recommendation that the TMA arrange to aid these physicians with financial assistance for legal aid or whatever administrative support they need is a sound one. In this report, on Page 2, Paragraph 2, the dates should be changed to June 30, 1966. Your Committee recommends adoption of the Council report with commendation and the following changes and additions:

This House of Delegates authorizes and encourages the TMA Board of Trustees to appropriate such funds as may be needed for legal aid, administrative help, or such other support that may be required to permit any

physician to terminate the corporate practice of medicine.

This House of Delegates reaffirms that the establishment of an enforcement of any code of ethics is the sole prerogative of the medical profession. Any attempt to alter our Code of Ethics by any party other than organized medicine must be resisted by all available means. It is further suggested that this House grant the Council broad leeway to extend the deadlines in certain circumstances as the Council feels it is justified and desirable."

## ACTION: ADOPTED

### **Report of the Executive Director**

"This report reflects the dynamic growth and vigor of our Association. TMA is truly the focal point of action of medical activity in Tennessee. The report points out the multitude of problems being constantly dealt with by a very capable administrative staff and especially Mr. Jack Ballantine and Mr. Hadley Williams deserve to be encouraged and complimented for an exceptionally fine job. We are extremely fortunate in having this capable group of dedicated staff members to help us fight our battles. This report is approved with commendation and the request that the Board of Trustees frequently review the salaries of all of our capable staff personnel to be sure that their financial remuneration is commensurate with their abilities and assigned duties. Mr. Speaker, we recommend that the report of the Executive Director be adopted."

## ACTION: ADOPTED

**The report of the Reference Committee on Reports of Officers was adopted as a whole.**

### **REPORT OF REFERENCE COMMITTEE ON REPORTS OF STANDING COMMITTEES**

GEORGE G. YOUNG, M.D., Chairman

The Reference Committee moved the adoption of reports of the following Standing Committees:

1. Committee on Scientific Work and Postgraduate Education—Editorial Board

2. Committee on Hospitals

Recommendation: That a closer liaison of the TMA and the Tennessee Hospital Association be maintained and that a three-member Executive Committee of TMA's Hospital Committee meet at regular intervals with the THA Executive Committee for perpetuating liaison.

3. Legislative and Public Policy Committee

Recommendation: Continuation of the doctor

contact system for the 1967 Legislative Session; the doctor to consider being a candidate for the State Legislature if this be feasible; influence patients by talking to them about the issues and why the doctor is supporting a certain candidate; support IMPACT by joining and urging fellow physicians to join; actively support a political candidate who basically has the philosophy of our free enterprise system.

4. Liaison Committee to the Public Health Department

Dr. Moore Moore, Jr., a member of the Public Health Council, presented an addendum to the report concerning the recommendation of the Advisory Committee to the Crippled Children's Service re-payments to physicians under the Crippled Children's Services: "That the Public Health Council agrees and endorses this and urges that TMA through appropriate channels, request funds from the State to implement this." The addendum to the report was adopted by the House of Delegates.

5. Committee on Insurance

Recommendation: That all of the metropolitan areas and larger societies advisory committees on liability insurance.

6. Committee on Cancer

7. Committee on Memoirs

8. Committee on Health Insurance

9. Advisory Committee to the Department of Public Welfare

10. Communications and Public Service Committee

11. Grievance Committee

12. Rural Health Committee

13. Committee on Tennessee Medical Foundation

## ACTION: ADOPTED

**The report of the Reference Committee (A) on Reports of Standing Committees was adopted as a whole.**

### **REPORT OF REFERENCE COMMITTEE (B) ON REPORTS OF SPECIAL COMMITTEES**

J. O. HALE, M.D., Chairman

The Reference Committee moved the adoption of reports of the following Special Committees:

1. Committee on Occupational Health

2. Advisory Committee to the Woman's Auxiliary

3. Committee on Blood Banks and Medical Laboratories
4. Committee on Mental Health
5. Committee on Health Project Contest
6. Committee on Sight Conservation
7. Tennessee Committee for American Medical Education and Research Foundation
8. Interprofessional Liaison Committee
9. Committee on Youth and Education
10. Committee on Medicine and Religion
11. Committee on Rehabilitation

**ACTION: ADOPTED**

Special Committees not reporting were: Committee on Disaster Medical Care and the Liaison Committee to United Mine Workers of America.

The Reference Committee moved the adoption of the following Special Reports:

1. Committee on Relationships Between Doctors of Medicine and Osteopathic Physicians
3. Report of the President of the Woman's Auxiliary
4. Report of Proceedings of the House of Delegates, AMA
5. Board of Directors of Tennessee Medical Association Student Education Fund

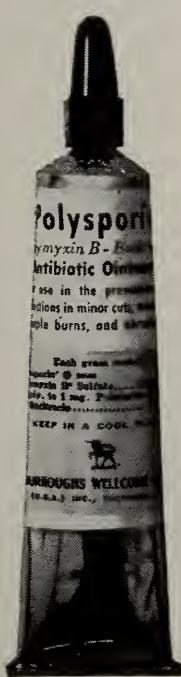
**ACTION: ADOPTED**

**The Report of Reference Committee (B) on Reports of Special Committees was adopted as a whole.**

There being no further business, the meeting of the House of Delegates adjourned at 10:45 A.M., sine die.

J. E. BALLENTINE, Executive Director

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## (propantheline bromide)

Intragastric photography has provided a new and precise method of measuring the effectiveness of anticholinergic drugs. The transition from gastric motor activity to relaxation seen with effective doses of such drugs takes only a few seconds and is easily demonstrated.

The importance of vagal stimulation of gastric hyperacidity and hypermotility makes such measurements particularly important in evaluating the parasympatholytic effect of drugs used in patients with peptic ulcer, gastritis, biliary dyskinesia and other gastrointestinal disorders.

Pro-Banthīne has been shown<sup>1</sup> to produce complete gastric motor inactivity with doses of 6 to 8 mg. intravenously. Comparison tests were made with the belladonna fraction, atropine. Measured usual dosage unit versus usual dosage unit, Pro-Banthīne was more than four times as effective as the belladonna alkaloid.

**Indications:** Peptic ulcer, functional hypermotility, irritable colon, pylorospasm and biliary dyskinesia.

**Oral Dosage:** Adequate dosage should be given for optimal results. For most adult patients this will be four to six 15-mg. tablets daily in divided doses. In severe conditions as many as two tablets four to six times daily may be required. Pro-Banthīne (brand of propantheline bromide) is supplied as tablets of 15 mg., as prolonged-acting tablets of 30 mg. and, for parenteral use, as serum-type ampuls of 30 mg.

**Side Effects and Contraindications:** Urinary hesitancy, xerostomia, mydriasis and, theoretically, a curare-like action may occur. Pro-Banthīne is contraindicated in patients with glaucoma, severe cardiac disease and prostatic hypertrophy.

1. Barowsky, H.; Greene, L., and Paulo, D.: Cinegastroscopic Observations on the Effect of Anticholinergic and Related Drugs on Gastric and Pyloric Motor Activity, Amer. J. Dig. Dis. 10:506-513 (June) 1965.

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## See for

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com the  
Executive  
Director

# EDICAL

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## News of Interest to Doctors in Tennessee

### ANNUAL MEETING HIGHLIGHTS

#### Total Annual Meeting Attendance—956

● Total physician registration at the annual meeting in Gatlinburg showed 625 doctors in attendance. 594 TMA members, 17 guest physicians and 14 residents and interns for the 625 total. In addition were 105 representatives of the technical exhibitors, and 226 ladies registered from the Woman's Auxiliary, totaling 956.

#### House of Delegates Actions

● Major actions of interest at the House of Delegates shows the following resolutions adopted: Fifteen dollar TMA dues increase, effective in 1967, making total dues \$55; Workmen's Compensation Law revisions requested for study by the Tennessee Legislative Council, such action requiring steps to effect the resolution through the Legislative Committee in the next Tennessee General Assembly; Recommended the State Department of Public Health to administer Title XIX of Medicare (comprehensive medical services for medically indigent of all age groups), with physicians being paid their usual and customary fees; Restrict operation of motor-driven cycles to persons over age fifteen; Reaffirmed policy on corporate practice of medicine and extended to June 30th the effective date for separate billing by physicians (including radiologists, pathologists) for professional services to hospital patients; Adopted action to discontinue the Tennessee Plan by not later than May 1, 1967 and authorized the Health Insurance Committee to set up a comprehensive plan involving usual and customary fees; Recommended that review committees determine whether fees are usual and customary; Opposed a bill putting optometry on a par with medicine.

Resolutions not adopted: Establishment of a relative value system as a method of determining fees; Payment of physicians for utilization review committee services; TMA endorsement for charges for handling third party forms (instead physicians were advised to take up such charges directly with third parties).

By-Laws Amendment: TMA meetings to begin with the House of Delegates on Thursday Night, with the second session of the House being held on Sunday Morning, instead of the earlier part of the week, Sunday through Tuesday, as has been in the past. The 1967 annual meeting will be held April 13-16 in Memphis.

#### Dependents Medical Care

● Contract termination: The present contract for medical care of military servicemen's dependents (original Dependents' Medical Care) will end May 31, 1966; TMA will seek usual and customary fees in any new arrangement. In addition, a new important committee on Governmental medical Services was established, with Claims Review and Utilization being set up to handle the requirements under the Medicare Law.

#### Medicare Presentation by Dr. Roth

● Up-to-the-minute information on regulations of the Medicare Law, were presented by Dr. Russell B. Roth, Erie, Pennsylvania, Chairman of AMA's Council on Medical Service. Dr. Roth is a member of the AMA Advisory Committee to

Health, Education and Welfare on recommendations pertaining to regulations under the Medicare Law.

● At the President's Banquet, Dr. G. Baker Hubbard, Jackson, assumed the Presidency on April 19th, succeeding Dr. John H. Burkhart, Knoxville.

● The President-Elect to lead TMA next year is Dr. K. M. Kressenberg, Pulaski, who will succeed to the Presidency during the 1967 meeting in Memphis.

● Re-elected as Chairman of the Board of Trustees was Dr. John C. Burch, Nashville. Dr. Kressenberg, Pulaski, was named Vice-Chairman. Dr. Burch was also re-elected Treasurer. Elected to the Board of Trustees for three-year terms were: Dr. Thomas J. Ellis, Johnson City; Dr. Charles A. Trahern, Clarksville; Dr. Oscar M. McCallum, Henderson; and Dr. Francis H. Cole, Memphis.

The newly elected Secretary was Dr. Robert M. Finks, Nashville.

● Dr. Tom E. Nesbitt, Nashville, was named Speaker of the House of Delegates, and Dr. R. L. DeSaussure, Memphis, was named Vice-Speaker. Both are for one year terms. In addition to those newly elected, the Board of Trustees includes: Dr. John H. Burkhart, Dr. Hubbard, Dr. Burch, and Dr. Edward T. Newell, Jr., Chattanooga.

● Elected for the 1966-67 year as Vice-Presidents were: Dr. Roy L. McDonald, Oneida, East Tennessee; Dr. B. K. Hibbett, III, Nashville, Middle Tennessee; Dr. Wm. T. Satterfield, Sr., Memphis, West Tennessee.

● Newly elected members of the Council included Dr. Edward G. Johnson, Chattanooga, Third District; Dr. B. G. Mitchell, Memphis, Tenth District (to complete the term of Dr. DeSaussure). Other members of the Council continuing to serve will be: Dr. J. J. Range, Johnson City, First District; Dr. John H. Saffold, Knoxville, Second District; Dr. Kenneth L. Haile, Cookeville, Fourth District; Dr. John Derryberry, Shelbyville, Fifth District; Dr. Harry T. Moore, Jr., Nashville, Sixth District; Dr. Carson E. Taylor, Lawrenceburg, Seventh District; Dr. Charles Hickman, Bells, Eighth District; and Dr. Byron O. Garner, Union City, Ninth District.

● Dr. Wm. J. Sheridan, Chattanooga, was elected to complete the unexpired term as a delegate to the AMA, replacing Dr. Chas. C. Smeltzer, Knoxville. Dr. John H. Burkhart, Knoxville, was named alternate delegate. Dr. Burkhart was elected for a two-year term, beginning January 1, 1967 as an AMA delegate, with Dr. Harmon L. Monroe of Erwin being named alternate delegate.

● Dr. Leonard W. Edwards, Nashville, was the recipient of the award made to the Outstanding Physician of the Year. Dr. Edwards was introduced by the Speaker of the House of Delegates in appropriate ceremony at the President's Banquet on April 18th.

● Two outstanding awards were made by the Association. The Board of Trustees presented a scroll to Dr. Chas. C. Smeltzer, Knoxville, for his outstanding service to the profession and to the Tennessee Medical Association. Dr. Alvin J. Ingram, member of the AMA Board of Trustees presented the AMA Viet Nam Plaque to Dr. Joe Bryant, Lebanon, for his medical services in Viet Nam.

● The 1967 Annual Meeting will be conducted in Memphis with headquarters at the Sheraton-Peabody Hotel. The meeting begins with the House of Delegates, April 13th, night and concluding at Noon Sunday, April 16th.

## Dr. Baker Hubbard Assumes Presidency

## Dr. K. M. Kressenberg—President-Elect Board of Trustees

## Speaker of the House

## Vice-Presidents

## Elected Members of the Council

## AMA Delegates and Alternates

## Outstanding Physician of the Year—Dr. Leonard W. Edwards, Nashville

## Distinguished Awards

## 1967 Annual Meeting in Memphis

# Public Service

## THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

### AMA Annual Convention Set For Chicago

- The 115th annual convention of the American Medical Association will be conducted in Chicago June 26-30 with the Palmer House serving as the headquarters hotel.

There will be six General Scientific Meetings, which will be held at the magnificent McCormick Place. In addition, more than 800 scientific and industrial exhibits along with 23 medical specialty programs with lectures, panel discussions, motion pictures and color television will be presented.

A special feature of the convention will be a guided tour of AMA headquarters and the new Institute for Biomedical Research.

All physicians, their wives and other convention guests are invited to tour the building with tours being conducted every hour from 9 a.m. to 4 p.m., Monday, June 27 through Friday, July 1.

A special corps of guides will escort the visitors and answer any questions regarding AMA publications, services and activities.

Many Tennessee physicians are expected to attend the meeting this year in Chicago, the convention capital of the world.

- The Annual Meeting of the Medical Assistants Society of Tennessee was held April 30 and May 1 in Jackson with a large number of members from across the state present.

Elected as officers for 1966-67 were: Mrs. Dorothy Jackson of Knoxville, president; Mrs. Ellen Smith of Winchester, vice-president; Mrs. Bettye Grisanti of Memphis, secretary; Mrs. Lois France of Johnson City, treasurer; and Mrs. Martha Puryear of Nashville, president-elect.

The 1967 annual meeting will be conducted in Nashville.

- Rep. John E. Fogarty (D-R.I.) has introduced a bill into Congress which would allow the USPHS Surgeon General to make generous grants to medical schools, community hospitals, health departments and other non-profit health agencies willing to establish adult health protection centers.

If adopted, the legislation would allow any adult over age 50 to get free periodic physical examinations by going to the health appraisal and disease detection center in his area. Test results would be forwarded to the patient's personal physician but the examination and all related tests would be free.

- The four regional Medicare conferences co-sponsored by TMA with the Tennessee Hospital Association and the Tennessee Nursing Home Association drew large and responsive audiences in each of the four metropolitan cities where the meetings were conducted.

Local county medical societies in each of the sites contributed immeasurably to making the conferences a success.

The meetings, held in Chattanooga, Knoxville, Nashville

### Medical Assistants Elect New Officers

### HR 12976 Permits Free Physicals

### Medicare Conferences Deemed Successful

**Medicare Conferences  
(continued)**

and Memphis, averaged more than 200 persons per meeting. Of particular interest were discussions concerning the role and operation of the Equitable Life Assurance Society, carrier for Part "B" of the new law in Tennessee. A large segment of each meeting's audience were medical assistants, secretaries, bookkeepers, nurses and aides that will be responsible for completing claims forms.

Additional information and a facsimile of the claims form will be found on the pages following.

## **FINAL MEDICARE FORMS ARE APPROVED**

(On the opposite facing page is an exact replica of the form to be used in filing claims for payment of medical services under Medicare with the instructions for completing the form reproduced on the following page. Below is a statement of Robert W. Ball, Commissioner of Social Security, regarding the adoption of the form.)

"REQUEST FOR PAYMENT" FORM: A single, easy-to-complete form for older people and physicians to use in requesting payment for medical services under the medicare program is announced by Robert M. Ball, Commissioner of Social Security.

The one-page form was developed in close cooperation with representatives of the American Medical Association's Council on Medical Services. It has also been approved by the Health Insurance Council, a body representing the health insurance industry. The form was discussed and recommended for adoption by the Health Insurance Benefits Advisory Council, a group appointed under the law to advise the Social Security Administration on administrative policies and regulations. Nine of the 16 members of the Advisory Council are physicians.

There will be two ways to claim payment for medical services. Under one method, the doctor will bill the patient, and after the patient has paid the bill, the patient will claim reimbursement from the intermediary. Under the other method, if the doctor and patient agree, the doctor will send in the claim and receive payment.

Under the payment-to-patient method, the patient will fill in the upper half of the form and attach the itemized received doctor bills. He will need to ask the doctor to fill out the lower part of the form only if the received bills do not give sufficient information about the type of services and where and when rendered.

Under the payment-to-doctor method, the patient will fill in the upper half of the "Request for Payment" form and give the form to the doctor. The doctor will then complete the lower half of the form and mail it to the organization that will be handling medical insurance benefits in that area of the country. This method of requesting payment can be used where all or any part of a medical bill still remains to be paid.

If the latter method is used, the doctor agrees to accept the amount paid to him (over and above the \$50 deductible amount) as 80 per cent of his total bill, and that he will collect from the patient no more than the remaining 20 per cent, plus any part of the \$50 deductible still outstanding.

A sample form and a form that the older person can use in making his first claim will be included in "Your Medicare Handbook," a detailed instruction book that will be mailed in June to all persons who are entitled to hospital insurance and medical insurance benefits under the medicare program.

## *Annual Meeting Highlights*

Chairman of the Board of Trustees and Treasurer, Dr. John C. Burch, presented representatives of Grundy County High School with a check for \$500 for the winning entry in the annual Health Project Contest. On hand to receive the award was left to right; Mrs. J. C. Ray, class sponsor, Miss Deborah Garner and Miss Frances Givens.



Speaker of the House of Delegates, Dr. J. Malcolm Aste, presented Dr. Leonard W. Edwards with the Physician-of-the-Year award at the President's Banquet.



A certificate of humanitarian service from the AMA went to Dr. Joe F. Bryant for his voluntary medical mission under Project Vietnam and was presented by Dr. Alvin J. Ingram (left), a member of the AMA Board of Trustees.



Retiring president Dr. John H. Burkhart presented the symbol of his office to the 1966 president, Dr. G. Baker Hubbard to conclude the festivities of the President's Banquet.



Officers elected by the House of Delegates to serve during 1966-67 were, left to right; Drs. Robert M. Finks, Secretary; William T. Satterfield, Vice-President, West Tennessee; Tom E. Nesbitt, Speaker of the House; B. K. Hibbett, III, Vice-President, Middle Tennessee; K. M. Kressenberg, President-elect; G. Baker Hubbard, President; and Roy L. McDonald, Vice-President, East Tennessee.

# President's Page

## Highlights of Our Annual Meeting



DR. HUBBARD

Thanks to the prior planning of our Executive Staff and the participation of a great number of physicians, we had a very worthwhile and successful annual meeting in Gatlinburg.

One-fifth of the physicians in this state were registered (625). There were 226 registered at the Woman's Auxiliary meeting and 105 exhibitors, with 42 exhibits.

The scientific sessions were well attended and physicians were exposed to excellent papers. Two-hundred fifty physicians attended the combined meeting of the Tennessee Ob-Gyn Society, the Tennessee Pediatric Society, the Tennessee Academy of General Practice, and the Tennessee Society of Anesthesiology. The subject was "Improved Newborn Care."

Dr. Russell B. Roth's presentation on Medicare clarified many issues and showed where confusion exists in the program. Mr. John T. McCarty presented his methods of communicating with the public. Rev. Roy Pfautch's talk at the IMPACT breakfast on "Practical Politics" stimulated all to further participation in this field.

You missed something if you did not hear Dr. John Burkhart's remarks at the President's Banquet. He in his sincere, articulate way gave us much to think about. What could have been more fitting than to have Dr. L. W. Edwards, Nashville, presented the outstanding physician's award.

There were many physicians who spent most of their time in the business of the House of Delegates. Following are some of the issues the House of Delegates decided:

Resolution No. 1 was adopted to raise the annual dues by fifteen dollars, effective next January 1, 1967. Resolution No. 7 from the Council, the Board of Trustees of TMA, the Tennessee Radiological Society, the Tennessee Society of Pathologists, and the Tennessee State Society of Anesthesiologists reaffirmed our policy on corporate practice of medicine and pledged the Association's continued backing of the hospital based specialists. The hospital based specialists were given until the 30th of June to accomplish a change in their contracts. Resolution No. 8 was adopted to discontinue the service benefits of the Tennessee Plan. This is to be accomplished by May 1, 1967. It was the belief of the House of Delegates that a relative value system for determining fees is helpful but should not be "official."

There were several resolutions on usual and customary fees. All charges should be on this basis.

The Board of Trustees established a Committee on Governmental Medical Services to be involved with the Medicare program.

The House of Delegates approved an amendment to the Constitution and By-Laws that would permit the Board of Trustees to set the date and time of the annual meeting in April each year. For 1967, the meeting will be held in Memphis on Thursday, Friday, Saturday and Sunday, the 13th to the 16th of April.

President

# THE JOURNAL

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(Specialty Society Representatives to be named)

JUNE, 1966

# EDITORIAL

## THE TENNESSEE PLAN IS HISTORY

At the 1966 Annual Session of the House of Delegates the following resolution was introduced by the Committee on Health Insurance.

"Whereas, most health insurance plans have been greatly expanded, covering more benefits to the public than ever before, and

"Whereas, present trends are such that government intervention in financing health care is playing a greater part in the economic life of all citizens to the end that federal and state funds are having a profound effect upon existing health insurance plans, and

"Whereas, the broadening of medical knowledge and development of new techniques has resulted in advanced types of medical procedures that are being performed today, not known in previous years when many health insurance plans were originated, and

"Whereas, the existing Tennessee Plan was established in 1949 and has basically continued since that time in its present format, and —

"RESOLVED, that the service benefits aspect of the Tennessee Plan be discontinued, along with the riders of in-hospital medical care, anesthesia, and radiological services; and be it further —

"RESOLVED, that the name 'The Tennessee Plan' be discontinued by May 1, 1967, on any policies that are presently in effect with the Tennessee Plan schedule; and be it further

"RESOLVED, that all participating physician agreements with the Tennessee Medical Association terminate by May 1, 1967."

With this resolution died a successful attempt of the Tennessee Medical Association in realistically facing the costs of medical care for those of limited means. As one who, either as an active member of the Committee, or as an ex-officio observer, sat in upon the development of *The Tennessee Plan* and its implementation, I also saw it gradually become an anachronism in an era of expansion of governmental financing in medical care. *Medicare*, the anticipated implementation of its Title XIX, and the almost universal availability of group health insurance to the remaining 60% of the citizens, have wiped out this more or less pioneering action of TMA. The reduction of marginal wage earnings among these 60% to a relatively minuscule group in our affluent society has made continuance of *The Tennessee Plan* quite needless.

*The Tennessee Plan* provided originally for the sponsorship of a service benefit insurance program to protect those in the \$2,400-3,600 income brackets against surgical fees in full. (Later with increasing income levels this ceiling was raised.)

Ultimately some 1.2 million citizens of the State fell under the provisions of *The Tennessee Plan*. Almost all members of TMA endorsed and participated in the acceptance of the fee schedule of the *Plan* in the earlier years. It was only with rising wages and government entering the picture that the profession saw a dwindling need for continued support of *The Tennessee Plan*. Recently there appeared the hazard that a fee schedule set for a more or less medically indigent population was being sized up as a yardstick for fees in general.

Thus, *The Tennessee Plan* had out-lived its usefulness and the House of Delegates moved its discontinuance. That other related venture, a "first" for a state medical association and one of which to be proud, the *Indigent Hospitalization Program*, automatically will receive the *coup de grace* by the provisions of *Medicare* in both its Titles XVIII and XIX.

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It would be improper to consign *The Tennessee Plan* to the files of history without acquainting the more recent members of TMA of the vision of its members who contributed so much of their time and energy in the embattled days of decision as to what form the Association's sponsorship of health insurance should take.

One recalls the members of the Committee on Prepaid Insurance and the Committee on Public Service who were the authors of these forward-looking steps to be taken by TMA—of the many, especially, Doctors L. W. Edwards, N. S. Shofner, R. B. Wood, D. W. Smith, J. Owsley Manier and W. C. Chaney. The many, many man-hours over the years which have been spent in deliberation upon the multitudinous problems and matters which have needed decisions cannot be imagined by those not involved. Here one must also give credit to the chairmen of the Committee upon whose shoulders have rested the responsibilities of collating the many summaries of subcommittees, the refereeing of disagreements between insurance carriers and surgeons, and the study of the rapidly moving trends in health insurance. Those who have contributed so ably as chairmen following the original Committee which got *The Tennessee Plan* off the ground are Doctors James Gardner, James Kirtley and B. K. Hibbett, III.

As criticism of the medical profession mounts in the press and elsewhere one can take refuge only in the rationalization that this represents ignorance, and hostility toward disease and authority. One is more sensitive to criticism from segments within the profession who at times pick up and propagate the misconceptions of our lay friends. These I have found to be doubly ignorant since they have given little attention to the efforts and achievements of their confreres. It is this lack of knowledge which has dictated an epilogue to *The Tennessee Plan*.

R.H.K.

## DEATHS

**Dr. Thomas Floyd Leatherwood**, 74, Memphis, died April 16th at his home following a long illness.

**Dr. James D. Lester**, 74, Nashville, died March 27th at his home after a heart attack.

**Dr. Claude Yerger Clarke**, 92, Mt. Pleasant, died April 30th in Maury County Hospital.

**Dr. John Ronald Hall**, 44, Memphis, died April 19th at his home.

**Dr. Monroe Franklin Brown**, 76, Nashville, assistant to the state commissioner of public health, died April 1st at his home.

**Dr. Benjamin A. Cockrell**, 79, Memphis, died March 28th at Kennedy Veterans Hospital following an illness of two months.

**Dr. Lawrence Johnson Lindsey**, 77, Covington, died April 4th at Tipton County Memorial Hospital.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

### Memphis-Shelby County Medical Society

The Memphis-Shelby County Medical Society met in the auditorium of the Institute of Pathology on May 3rd. The program entitled, "Maturity Options of the Retirement Trust" was presented by Mr. Denby Brandon, Plan Co-ordinator; Mr. Dunlap Cannon, Trust Attorney; and Mr. George Webb, Senior Vice-President, Union Planters Bank. Mr. Brandon discussed "Special Annuity Options"; Mr. Cannon—"Taxability"; and Mr. Webb—"Trusts".

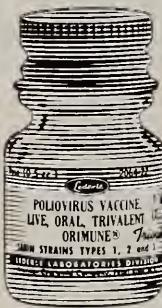
A panel, composed of the speakers and the Trust Committee, offered the membership an opportunity to ask any questions they might have concerning the plan.

### Benton-Humphries Medical Society

The meeting of the Society on May 6th was one of three proposed sessions on traumatology. Guest speaker was Dr. Greer Ricketson of Nashville. Dr. Ricketson's presentation was entitled, "Emergency Treatment of Maxillo-Facial Injuries, Newer Suture and Other Techniques to Reduce Disfigurement Following Injuries."

The second session, in June, was a presentation by Dr. Arnold Haber, Nashville, on the emergency treatment of fractures and orthopedic problems in acute injuries. The third session to be held in July will be a discussion by a general surgeon on the emergency treatment of soft tissue and internal organ injuries of the abdomen and thoracic cavity.

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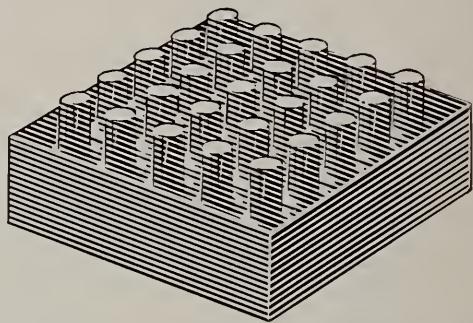
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\*Rosenthal, S. R., Nikurs, L., Yordy, E., and Williams, W.: Scientific Exhibit Presented at the Annual Meeting of the National Tuberculosis Association, Chicago, Illinois, May 30-June 2, 1965.

### Chattanooga-Hamilton County Medical Society

The Society met on June 7th in the auditorium of the Interstate Building. The scientific program consisted of case reports by Drs. Orville C. Gass, Paul E. Hawkins, Jesse E. Adams, and E. F. Besemann.

### Roane-Anderson County Medical Society

Dr. John H. Burkhart, immediate past-president of the Tennessee Medical Association, was guest speaker at the meeting of the Society on April 26th. The Society's delegates to the TMA presented a report of the proceedings of the House of Delegates of the Tennessee Medical Association in Gatlinburg, April 17-19. The meeting was held in the Dining Room of the Oak Ridge Hospital.

### Hamblen County Medical Society

Dr. Jesse M. Meredith, assistant professor of surgery at Bowman Gray School of Medicine in Winston-Salem, N.C., addressed the Hamblen County Medical Society at its meeting on April 5th. The meeting was held at the Health Department in Morristown.

### Knoxville Academy of Medicine

"Progress in Therapy of Neoplastic Diseases" was the subject discussed by Dr. Benjamin F. Rush, Jr., Acting Chairman, Department of Surgery, University of Kentucky, Lexington, at the meeting of the Academy on May 10th. The program was sponsored through the courtesy of the Knox County Unit of the American Cancer Society.

## NATIONAL NEWS

### The Month in Washington

(From the Washington Office, AMA)

The importance of the role of the general practitioner is emphasized in the recommendations of the National Commission on Community Health Services to President

Johnson. The Commission said that everyone should have a personal physician, even under the group practice system. Under these conditions, the Commission added, group practice should be stimulated. It is essential that the physician-patient relationship be strengthened "if comprehensive personal health services of high quality for each individual are to be achieved," the Commission said. "The long range impact of the recommendation of having the personal physician assume responsibility as the central source for preventive health service and continuing care, most particularly its impact on medical education, is well appreciated.

Other Commission recommendations included: breaking down eventually all separate systems of health care such as for veterans, labor members, merchant seamen, and the medically indigent; orienting all health care services on a community basis. President Johnson endorsed the recommendations, but predicted that it would be many years before they would be fully implemented.



The National Academy of Sciences-National Research Council will undertake for the Food and Drug Administration a new evaluation of the efficacy of about 4,000 prescription drugs, starting this summer. Dr. James L. Goddard, FDA Commissioner said "The determination of the efficacy of new drugs marketed from 1938 to 1962 is called for under the Kefauver-Harris Amendments of 1962. I am grateful that the National Academy, with its capability of calling upon the talents of the nation's most distinguished scientists, is willing to accept this important public responsibility. The review will be the most extensive efficacy study of drugs ever undertaken. Results of the study will guide the FDA in its final determination of the effectiveness of the drugs.

C. Joseph Stetler, president of the Pharmaceutical Manufacturers Association, commended the selection of the academy for the task. "PMA is delighted that this method was selected. Based on past activities, we are certain that the academy will work with both industry and medical prac-



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1. Weese, H.: Personal Communication, Sept. 25, 1964. 2. Glynn, R.: Obst. & Gynec. 20:369, 1962.

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titioners in forming guidelines for determining the effectiveness of these products."

Since October, 1962, manufacturers have been required under the Kefauver-Harris Amendments to submit substantial evidence to support therapeutic claims before receiving FDA approval to market a new drug. The NAS-NRC review will put to the efficacy test new drugs marketed under the provisions of 1938 legislation, which required only a showing that drugs were safe for their intended use. The 1938 Act excluded from FDA approval procedures drugs already on the market, as well as drugs introduced after that date that were generally recognized as safe by qualified experts.

Dr. James Z. Appel, president of the American Medical Association, sharply criticized the FDA's enforcement of the 1962 Drug Act Amendments in a speech at Chicago, and listed ten counts on the "minus side" of the FDA record on administering the amendments.

"The manner in which the Agency suddenly seizes drugs and accompanies this activity with alarming language tends to create an atmosphere of hysteria. It also is creating a restrictive and undesirable medico-legal climate that will inevitably exert a deleterious influence on the effective use of drugs by the physician. This trend is causing the medical profession much concern. . . Nagging us is the increasing suspicion that regulatory decision may be dictated more by the technicalities of regulatory language than by appeal to competent medical and scientific analysis and judgment. The tame submission of the pharmaceutical industry to any and every regulatory suggestion or directive, regardless of the medical and scientific facts involved, is unsettling. . .

"At the time of the passage of the 1962 amendments and subsequent regulations, we were concerned about the advisability of non-medically oriented lay FDA inspectors being permitted to inspect and copy the case records of physicians engaged in clinical investigation. This could only result in a non-professional acting as a judge in a professional area and also invading the physician-patient relationship. We have

been apprised of incidents where such inspection has extended even to the personal file of an investigating physician. The future implementing of this aspect of drug investigation cannot help but concern us." Appel also listed some "plus factors" for the FDA, including the fact that a physician now is FDA Commissioner.



The AMA has reiterated its support of a federal program to aid in modernization of hospitals. Dr. F. J. L. Blasingame, executive vice-president of the AMA, wrote the Senate Health Subcommittee that the AMA supports that provision of an Administration bill (S. 3009) that would provide grants and loans for modernization of hospitals and other medical facilities, through direct federal loans, government guarantee of private loans, and also federal grants with respect to loans, amortizing principal and interests payments thereon up to 40% of a project.

"While the present Hill-Burton program does provide for modernization of hospital facilities with priority 'in the case of projects for modernization of facilities, to facilities serving densely populated areas,' we nevertheless feel, because of the great need which exists, that the special program contemplated under S. 3009 for modernization of facilities in metropolitan areas is indeed warranted," Blasingame said.

The AMA opposed some other provisions of the legislation. It was recommended that aid for diagnostic or treatment centers be eliminated and that federal money be available to only those public health centers operated by a public health department.

## MEDICAL NEWS IN TENNESSEE

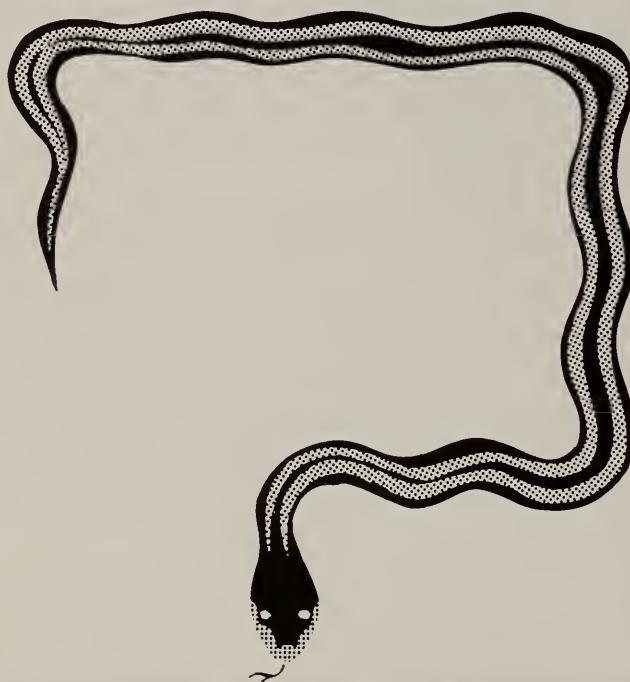
### Middle Tennessee Medical Association

The 143rd semiannual meeting of the Middle Tennessee Medical Association was held at River Bend Country Club in Shelbyville on May 19th. Speakers and their subjects were:

"Carcinoma of Thyroglossal Duct"—Dr. John K. Wright, Nashville; "Selection of

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1. Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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A Symposium on Shock was moderated by Dr. Wm. H. Edwards of Nashville. Panelists were Drs. Paul H. Barnett, John A. Oates, Jr. and William S. Stoney, Nashville.

The Presidential Address by Dr. Arnold M. Meirowsky was entitled, "Theodoric, XIIth Century Surgeon."

### Tennessee Hospital Receives Safety Award

Chamberlain Memorial Hospital in Rockwood, Tennessee, with 100 to 199 employees, received one of eight first place awards given to hospitals of varying size in the 1965 Hospital Safety contest, sponsored by the American Hospital Association and the National Safety Council. A total of 372 hospitals completed the contest designed to encourage and recognize safety among hospital employees. Each of the eight hospitals reported the largest number of injury free man-hours or had the lowest injury frequency rate for their size category. McGuire Veterans Administration Hospital in Richmond, Virginia, was named grand award winner in the contest.

### Regional Conference on Mental Retardation

Specialists from Tennessee and five other

states attended the third Southeastern regional conference on mental retardation, April 25-26 in Memphis. David Ray, Jr., special assistant to the secretary of mental retardation activities, Department of Health, Education and Welfare, discussed national trends of mental retardation programs. Dr. Sheldon Korones, member of the UT pediatrics staff, reported on research on the causes of brain damage during pregnancy and delivery, one of fourteen government-financed studies conducted throughout the nation in areas relating to mental retardation. Other subjects discussed at the conference included methods of classifying and evaluating mentally retarded patients, neurological screening of infants and relationships of clinics to Project Headstart.

Other states represented were Mississippi, Alabama, Georgia, South Carolina and Florida.

### Progress of Medical Self Help Training Program in Tennessee

10,514 Tennesseans received Medical Self Help training in the first three months of 1966. The Health Mobilization Service (Civil Defense) reported that Tennessee has exceeded 100,000 persons trained, with only two states, Texas and Pennsylvania having more trained citizens. According to the latest report from the Department of Health, Education, and Welfare, Tennessee ranks first in the Southeast with 100,101 students trained since March, 1963. Alabama had 71,339; Florida, 58,549; Mississippi, 35,810; South Carolina, 32,885; and Georgia, 24,907.

### University of Tennessee College of Medicine

Sixteen University of Tennessee College of Medicine faculty members and two visiting surgeons presented a three-day course in gastrointestinal surgery for Mid-South general practitioners, April 13-15. Guest clinicians were Dr. John Beal, professor and chairman of the Northwestern University Medical School, department of surgery, Chicago; and Dr. Richard Shackleford, medical text author and member of the surgical staff at Johns Hopkins University

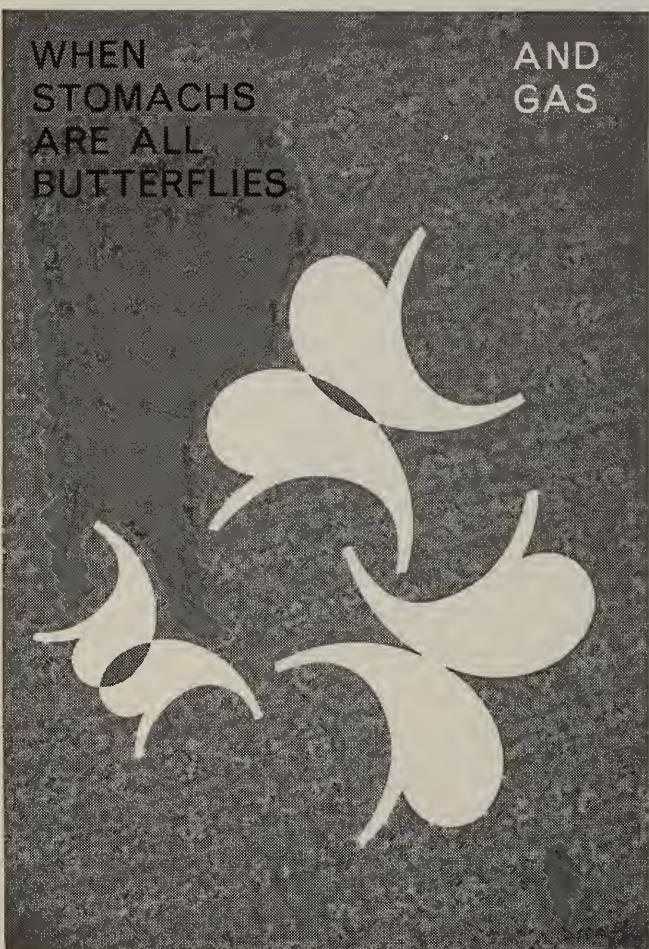
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School of Medicine, Baltimore. The course was sponsored by the UT department of surgery and is part of the university's continuing education program.

The U. S. Department of Health Education and Welfare announced the approval of \$3,199,710 grant to the University of Tennessee Medical Units to be used in the construction of a mental retardation center. Estimated construction cost of the university-affiliated facility is \$4,266,000. Of the money needed, \$1,100,000 will come from non-Federal sources. The United Cerebral Palsy Association raised \$100,000. State funds amount to \$750,000 and the UT Board of Trustees committed \$250,000 in university funds. The primary purpose of the center is to train persons who will enter professional work with the mentally retarded. The project would join classrooms and faculty of the University of Tennessee, both Knoxville and Memphis, Memphis State University, University of Mississippi and Meharry Medical College in Nashville.

### Symposium on Diseases of the Liver

The medical staff of Bristol Memorial Hospital sponsored a medical symposium on "Diseases of the Liver" for the physicians of Bristol and surrounding area, April 21st. Among the speakers were Dr. John H. Foster of Vanderbilt University, Dr. Hyman J. Zimmerman of George Washington University, Dr. Audrey K. Brown of the University of Virginia, and Dr. Thomas K. O'Brien, Jr. of the Bowman Gray School of Medicine.

Subjects discussed included: Surgical Physiology in Liver Diseases; Clinical Applications of Liver Function Tests, Metabolic and Inborn Errors in Liver Diseases, Chronic Cirrhosis and Lupoid Involvement, Surgery in Liver Diseases and Clinical Syndromes of Cirrhosis.

## PERSONAL NEWS

### PERSONAL NEWS

Physicians named to top positions in their respective specialty societies in April were: **Dr. David Dunavant**, Memphis, President of the Tennessee Chapter, American College of Surgeons, **Dr.**

**Rollin Daniel**, Nashville, President-Elect, **Dr. H. William Scott**, Nashville, Vice-President, and **Dr. John Kesterson**, Knoxville, Secretary-Treasurer. **Dr. Henry B. Brackin, Sr.**, Nashville, President of the Tennessee District Branch of American Psychiatric Association, **Dr. Justin H. Adler**, Memphis, President-Elect, and **Dr. Harvey C. Reese**, Memphis, Secretary-Treasurer. **Dr. Boyer M. Brady**, Memphis, President of the Tennessee Radiological Society, **Dr. J. Marsh Frere, Jr.**, Knoxville, President-Elect, and **Dr. Marion Spurgeon**, Clarksville, Secretary. **Dr. R. E. Semmes**, Memphis, President of the Tennessee Neurosurgical Society, and **Dr. C. D. Hawkes**, Memphis, Secretary-Treasurer. **Dr. H. G. DuBard**, Memphis, President of the Tennessee Industrial Medical Association, **Dr. H. W. Hollingsworth**, President-Elect, and **Dr. Paul V. Nolan**, Chattanooga, Secretary-Treasurer. **Dr. Richard C. Sexton**, Knoxville, President of the Tennessee Diabetes Association, and **Dr. Jean Hawkes**, Memphis, Secretary-Treasurer. **Dr. Thomas W. Waring**, Memphis, President of the Tennessee State Orthopaedic Society, **Dr. James G. McClure**, Memphis, Vice-President, and **Dr. Wendell L. Whittemore**, Memphis, Secretary-Treasurer. **Dr. Wm. F. Mackey**, Memphis, President of the Tennessee Obstetrical and Gynecological Society, **Dr. Harry E. Jones**, Chattanooga, President-Elect, and **Dr. Robert W. Boatwright**, Secretary-Treasurer.

**Dr. L. W. Edwards**, Nashville, was named Outstanding Physician of the Year at the annual meeting of the Tennessee Medical Association in Gatlinburg, April 17th.

**Dr. Alvin J. Ingram**, Memphis, was a participant in a panel discussion entitled, "The Battered Adult," held at a recent sectional meeting of the American College of Surgeons at Bal Harbour, Florida.

**Dr. William J. Darby**, Nashville, was awarded the honorary degree of Doctor of Science by the University of Michigan for his contributions in the field of nutrition.

Three Tennessee physicians have been reappointed to committees and councils of the American Medical Association. **Dr. Chas. C. Smeltzer**, Knoxville, has been reappointed Chairman of the Committee on Blood; **Dr. Marcus J. Stewart**, Memphis, was reappointed to a new term on the Committee on Rehabilitation; and **Dr. A. Roy Tyrer, Jr.**, Memphis, has been reappointed to the Council on Voluntary Health Agencies.

**Dr. Donald LeQuire**, formerly of Murfreesboro, has opened his office for the practice of medicine in Maryville.

**Drs. Nathan A. Ridgeway, Jr., Robert H. Jernigan**, and **Joseph F. Fleming** were participants in the 1966 Cardiac Nursing Seminar held in Kingsport, April 19-20.

**Dr. R. H. Kampmeier**, Nashville, was named President-Elect of the American College of Physicians, at the 47th annual session of the College in New York City. He will become President in April, 1967.

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**Dr. Elsie V. Tomkinson** is the most recent addition to the medical staff of The Oak Ridge Hospital, having joined Dr. Robert Ball as an associate in the department of radiology.

**Dr. Joe F. Bryant**, Lebanon physician who recently returned from a voluntary medical mission to South Viet Nam, received an award from the American Medical Association. The AMA Certificate of Humanitarian Service was presented to Dr. Bryant during the Annual Meeting of the Tennessee Medical Association in Gatlinburg.

**Dr. Max A. Crocker** has joined the staff of Lewis County General Hospital and will be associated with Drs. Edgar D. Akin and B. J. Smith.

**Dr. Sam H. Sanders**, Memphis, has been elected to a two-year term on the Board of Directors of the American Academy of Facial Plastic and Reconstructive Surgery.

**Dr. Grant W. Liddle**, Nashville, was elected president of the American Society For Clinical Investigation at its meeting in Atlantic City.

**Dr. George V. Mann**, Nashville, has been installed as president of The Middle Tennessee Heart Association.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966

#### State

Sept. 26-27	Tennessee Valley Medical Assembly, Tivoli Theater, Chattanooga
Oct. 12-13	Second Annual Tennessee Mental Illness & Health Congress, Hotel Hermitage, Nashville
Nov. 9-11	Tennessee Academy of General Practice, 18th Annual Scientific Assembly and Congress of Delegates, Gatlinburg Auditorium, Gatlinburg

#### National

June 20-23	American Proctologic Society, Sheraton-Cleveland Hotel, Cleveland
June 23-27	American College of Chest Physicians, Sheraton-Chicago Hotel, Chicago
June 25-26	American Diabetes Association, LaSalle Hotel, Chicago
June 26-30	American Medical Association, Palmer House, Chicago
Sept. 8-10	American Association of Obstetricians and Gynecologists, The Homestead, Hot Springs, Va.
Sept. 16-24	American Society of Clinical Pathologists, Washington Hilton Hotel, Washington, D.C.

Sept. 17-23	College of American Pathologists, Washington Hilton Hotel, Washington, D.C.
Sept. 29-Oct. 2	American Medical Writers' Association, Annual Meeting, Waldorf Astoria, New York
Oct. 1-5	American Society of Anesthesiologists, Sheraton Hotel, Philadelphia
Oct. 1-7	Annual Otolaryngologic Assembly of 1966, New Illinois Eye and Ear Infirmary at the Medical Center, Chicago
Oct. 2-8	American Society of Plastic and Reconstructive Surgeons, Inc. Flamingo Hotel, Las Vegas, Nev.
Oct. 10-14	American College of Surgeons, Fairmont Hotel, San Francisco
Oct. 10-13	American Academy of General Practice, War Memorial Auditorium, Boston
Oct. 15-16	American Association of Ophthalmology, Palmer House, Chicago
Oct. 22-27	American Academy of Pediatrics, Palmer House, Chicago
Oct. 23-26	American College of Gastroenterology, Bellevue-Stratford Hotel, Philadelphia

### Annual Otolaryngologic Assembly

The Annual Otolaryngologic Assembly of 1966 will be held October 1 through 7, in the new Illinois Eye and Ear Infirmary at the Medical Center, Chicago. The Department of Otolaryngology of the College of Medicine of the University of Illinois offers a condensed postgraduate basic and clinical program for practicing otolaryngologists under the direction of Doctor Emanuel M. Skolnik. It is designed to bring to specialists current information in medical and surgical otorhinolaryngology. Interested physicians should direct communications to the Department of Otolaryngology, P.O. Box 6998, Chicago, Illinois, 60680.

### American Physical Therapy Association

The 43rd Annual Conference of the American Physical Therapy Association is scheduled for July 10-15, at the Biltmore Hotel in Los Angeles, California. Physicians, nurses, occupational therapists, speech therapists, prosthetists and orthotists, and members of other allied health professions are invited to attend the program sessions and the exhibits. Non-member registration fee is \$25.00. Additional information may be obtained from Helen J. Hislop, Ph.D., Director of Conference Services, American Physical Therapy Association, 1790 Broadway, New York, New York, 10019.

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**ADMINISTRATION AND DOSAGE:** Dosage, based upon body weight and Gm. Hb./100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

**SIDE EFFECTS:** Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylactoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported. Initial test doses of 0.5 cc. are advisable.

**PRECAUTIONS:** If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

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## Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville 12, Tennessee.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, J. Tennessee M. A., 35:132, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

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R. H. KAMPMEIER, M.D., Editor

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# Journal of the Tennessee Medical Association

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It is well known that less than a third of women in the high-risk groups in this country have the benefit of a Pap smear, even once, leave alone annual examinations. That the Pap smear reduces the frequency of uterine cancer is an established fact. Though the vaginal irrigation technic does not equal pelvic examination and the direct smear taken by the doctor, it can be used to reach more women and has an inestimable educational value.

## Vaginal Irrigation Cytology\*

T. C. MOSS, M.D., and C. C. FARROW, M.D.,<sup>†</sup> Memphis, Tenn.

It is well known that even under more or less ideal conditions in urban centers that less than 50% of the adult female population takes advantage of the Papanicolaou smear for the detection of uterine cancer. Since this test is very valuable and can save thousands of lives annually, it is regrettable that it is not used more widely. The chief reasons it does not reach a wider segment of the population appear to be: (1) economy, (2) inconvenience, (3) lack of education, and (4) inertia. Lack of education and inertia are best attacked by responsible parties through the media of newspapers, radio and television.

The deterring factors to vaginal cytology of economy and inconvenience have been attacked by methods allowing the patient to take her own smears in her own home and at her convenience. One method used an applicator suitable for obtaining material, and another method utilized a vaginal tampon. Both methods failed because of the poor quantity and quality of the smears obtained. In 1962, Hugh Davis,<sup>1</sup> working at the radium station in Copenhagen, Denmark, described a new method of obtaining high quality samples of vaginal cells by use of an irrigation technic. This method utilizes a disposable plastic pipette which contains a cell preserving solution. The vagina and cervix are irrigated by squeezing the bulb of the pipette, and the solution is then aspirated into the bulb where it is ready to

be sent to the laboratory for examination. The results of the method have been good in capable hands and compare well with the conventional method of obtaining material for Papanicolaou smears.

### Materials and Methods<sup>2</sup>

The disposable plastic pipette is designed to have a bulb which fits into the cups of the ordinary hospital centrifuge. The bulb portion is cylindrical and contains about 20 cc. of a fixative solution composed of 20% ethyl alcohol and normal saline. The stem of the pipette which is inserted into the vagina is detachable from the bulb at one of its ends, the other end having a cap which can be removed to allow fluid to pass into the vagina. Pressure on the bulb squirts the fluid into the vagina; release of the pressure permits the bulb to expand and aspirate the fixative from the vagina. The patient is usually advised to sit on the forward edge of a commode, to insert the stem of the pipette into the vagina, to squeeze all the fluid out of the bulb of the pipette, and then allow it to be aspirated back into the bulb by releasing the pressure on the bulb. A rich cell suspension is thus obtained. The pipette is returned to the laboratory by inserting it into a mailing tube along with the information slip which accompanies the pipette, and mailing it. It may be desirable to return the slip and pipette by other means.

On arrival in the laboratory the cell suspensions of several patients are processed simultaneously. (1) The pipettes are centrifuged briefly to obtain a sediment; (2) The seal between the stem and bulb is

\*Read at the meeting of the Tennessee Society of Pathologists, April 18, 1966, Gatlinburg, Tenn.

<sup>†</sup>From the Moss-Farrow Pathology Laboratory, Memphis, Tenn.

snapped and one-half the supernatant is poured off, an equal volume of a stronger fixative, which consists of absolute alcohol 100 cc., 15 cc. of ether and 2 cc. of glacial acetic acid, is then added; (3) After standing in a resuspended state for 15 minutes the pipettes are recentrifuged, the supernatant poured off, and the cells resuspended in pure fixative for 2 minutes; (4) The suspension is next briefly centrifuged and the supernatant poured off, the sediment being thoroughly mixed for use in making smears; (5) Smears are made by using the stem of the pipette as an aspirating pipette. A small rubber bulb is placed on one end, the other end is placed in the sediment and enough material aspirated to make smears. A drop of the sediment is placed on one end of a slide and the smear made by drawing the material along the slide behind the pipette stem which is laid flat on the slide and passed toward the opposite end of the slide; (6) The sediment in the pipette bulb is saved to be used to make further smears if desired.

#### Results Obtained by this Method

During the late spring of 1965, a program of irrigation smear cytology was carried out at Humboldt, Tennessee. Sister Mary Virginia Rams, in charge of the laboratory of St. Mary's Hospital and well trained in cytology, thought the cytologic technic was not used to a desirable degree in the community. After consultation with the pathologist, the hospital staff, the public health officer Dr. M. D. Ingram, and officials of the American Cancer Society, it was decided to institute a city-wide screening program for uterine cancer in Humboldt by means of the irrigation smear technic. To prepare for the program Sister Mary Virginia Rams spent several weeks in the laboratory of Dr. Hugh Davis, now in Baltimore, Maryland. Here she learned the peculiarities of the method. The American Cancer Society donated \$1,000.00 to pay expenses of the program; the screening was done gratis by the hospital; and the Women's Auxiliary of the hospital, as well as an active Humboldt women's civic organization, took part in the distribution of the pipettes. The city officials, the newspaper, and the local radio

station cooperated generously in promoting the program. The latest census was used to obtain names and addresses of adult female citizens.

At first the program was limited to women between the ages of 30 and 45 because it was believed this age group would include most of those who might possibly be helped by the method. Later, however, the program was expanded to include all women in the city who wished to have the examination done. There were 943 women in Humboldt eligible to receive the pipettes as between the ages of 30 and 45; 763 of these women were approached and received pipettes. The remaining women could not be reached because of having moved, or because they refused the pipettes for various reasons, such as hysterectomy for example. The pipettes were then made available to all other women in Humboldt, and 199 women took advantage of the offer. One hundred and eighty-nine of the women who received the pipettes did not return them. Two-thirds of the women who returned the pipettes had never had a previous Papanicolaou smear.

The following table lists the results of the examinations.

Table I

Participants .....	754
White .....	610
Negro .....	144
Ages, 30-45 .....	555
Over 45 .....	160 (oldest 71)
Under 30 .....	39 (youngest 21)
Findings .....	
Positive .....	9 (1.2%)
Inconclusive .....	49 (6.5%)
Unsatisfactory .....	15 (2.0%)
Trichomonas .....	125 (16.5%)
Results of biopsies on positive cases .....	
Squamous metaplasia with marked atypicalities .....	1
Invasive squamous cell carcinoma .....	1
Carcinoma in situ of squamous cell type .....	7
Results in positive cases as to age .....	
Under 30 yrs. of age (only 39 examined) .....	2
Between 30-45 yrs. of age (555 examined) .....	7
Over 45 yrs. of age (160 examined) .....	0

#### Discussion

Of the 9 cases diagnosed as positive, only 3 cases were declared positive on the first examination. The remainder were called inconclusive and another smear was examined, obtained either by the irrigation smear technic or by regular Papanicolaou smear method as obtained by a physician.

The results obtained by the irrigation smear screening were very gratifying, and we believe at least 8 persons were saved from possible incurable carcinoma of the cervix. The entire community was thoroughly educated to the value of Papanicolaou smears by the publicity which the campaign entailed. Since the completion of the project the number of Papanicolaou smears examined in Humboldt and the surrounding community approximately has doubled.

The value of the irrigation smear cytology for uterine cancer is chiefly its economy, simplicity and convenience. The pipettes cost less than 20 cents and any woman can easily understand directions for obtaining the smear. The cardboard mailing container has the return address of the laboratory already pasted on the exterior so return mailing is simplified. There is no substitute for a vaginal and cervical examination by a physician, but many women neglect to have a Papanicolaou smear made because of the expense and trouble of a visit to a physician. Some of these women can be reached by the irrigation smear method. Furthermore, there are also not enough physicians to examine and take smears from all women who should have the test.

The examination of the smears requires a slightly higher index of suspicion than smears made by the usual Papanicolaou method. The results of the method compare favorably with other methods when done by skilled screeners specially trained in the

method. There is 95% or better agreement between the results of the irrigation smear technic and the conventional method of obtaining Papanicolaou smears.<sup>3</sup> The irrigation smear technic permits several subsequent smears to be made on aspirated material if the first examination is inconclusive. A major benefit of the irrigation smear program is stimulation of women to visit their physician to obtain a Papanicolaou smear and pelvic examination. One advantage of the irrigation smear technic is that the preparation of smears is in the hands of skilled laboratory personnel adept in making ideal smears.

The disadvantages of the irrigation smear technic is the higher index of suspicion needed to read the smears, the smaller number of malignant cells present on the smears in positive cases, the multiplicity of centrifugations required to process the material, and the failure of the patient to see her physician at the time smears are made. Naturally, all suspicious or positive cases are referred to a physician.

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*"The punishment that the wise suffer who refuse to take part in the government is to live under the government of worse men." . . . Plato*

JOIN

**IMPACT**

The authors believe the Hydrocollator Steam Pack offers advantages over other methods of applying moist heat to the perineum.

# Perineal Applications of Moist Heat by A Modified Ob. Hydrocollator Steam Pack\*

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Chattanooga, Tenn.

Postpartum cervical heat therapy is a routine used in many hospitals. Whether applied by use of a heat lamp, hot soaks or Sitz baths, the value is primarily its soothing effect upon the perineal tissues.

The healing qualities of heat cannot be refuted. The localization of inflammatory reaction by the application of heat still remains standard therapy in spite of many medical advancements. The object of such treatment is to increase local blood flow to the involved areas with potential hastening of the healing processes.

The physiology of local heat therapy on tissues has been reviewed, studied, and established, and so will not be part of this presentation.<sup>1,2</sup> We are reporting our experience with a modification for the perineum of a commercial pack known as a Hydrocollator Steam Pack. This is the same pack which has been used for relief of various neuromuscular disorders.<sup>3-5</sup>

The Hydrocollator Steam Pack consists of

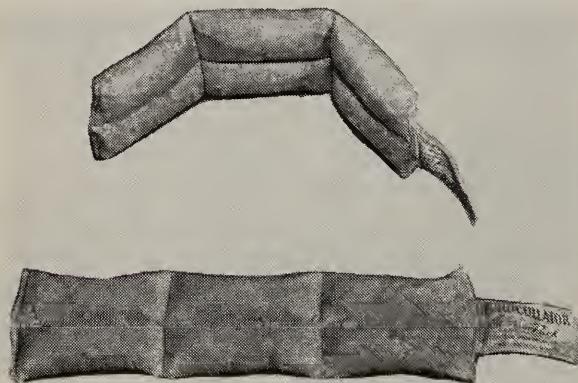


FIG. 1. Modified Hydrocollator Steam Pack for perineal use. Curved pack is before immersion; flat pack is after immersion.

\*Read at the meeting of the Tennessee State Obstetrical and Gynecological Society, April 18, 1966, Gatlinburg, Tenn.

†From the Memorial Hospital, Chattanooga, Tenn.

a series of fabric cells containing a filler of hydrous aluminum silicate. The OB. Pack modified from the original steam pack consists of two rows of these cells (Fig. 1). Briefly, hydrous aluminum silicate has the properties of absorbing water and forming a gel. This gel retained by the fabric, when heated, will contain 80 to 85% of water. In addition, heat is released slowly, permitting effective applications for a half hour or more. The length of time was found to be consistent with our standard postpartum 20 minute applications of moist heat.

## Method

A special master heating unit for the OB. packs is necessary (Fig. 2). This unit con-

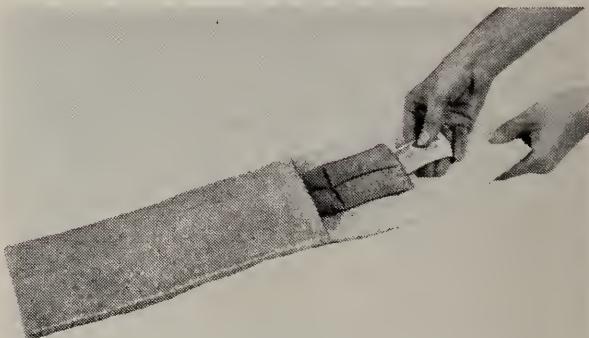


FIG. 2. Steam Pack inserted into terry cloth cover.

sists of a wire rack to support the steam packs and a hot water bath into which the pack is immersed. The heat is controlled by a thermostat to maintain the water at about 170°F. New packs must be immersed for 1 hour, but used packs 15 to 20 minutes. A terry cloth cover, designed by one of us (S.M.R.), provided a convenient method of holding the pack against the perineum. (Fig. 3.) The terry cloth also diminishes the intensity of the heat upon the skin.



FIG. 3. Master unit for heating and storing Steam Packs.

The pack is removed from the master heating unit, placed in a terry cloth cover, and carried to the patient. The pack is held in place by a sanitary napkin belt and left on for the duration of the treatment. Upon completion, the pack may be removed without assistance and picked up later by the aide. The Hydrocollator Pack is later removed from the cover and is immersed in the heat bath for re-use; the cover is sent to the laundry for cleansing before it is used again.

#### Evaluation of the Treatment

An attempt was made to evaluate the properties of this pack to assess its value as adjuvant therapy for the postpartum patient. We tried to evaluate the properties of the pack with the use of a recording thermocouple apparatus. Several tests were done in which the pack was enclosed in various types of material (Fig. 4). It was found that the pack retained therapeutic levels of heat for more than 30 minutes whether it was enclosed in single or double thickness gauze sterile dressings or in the terry cloth dressings as used in the OB. pack. We also measured the heat absorption and loss with conventional hot compresses consisting of two layers of turkish towel, heated in the same water bath and wrung out. The difference in the heat retaining

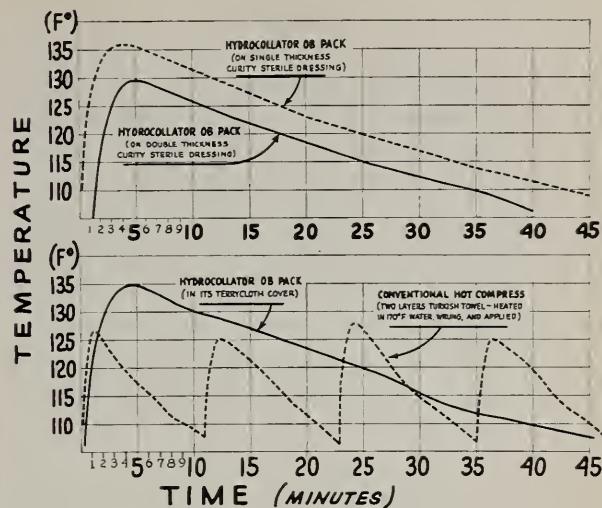


FIG. 4. Top graph—a record of temperature curve and heat loss when Steam Pack covered by single and double thickness Curity sterile dressing. Bottom graph—Steam Pack in terry cloth cover—compared with hot compress made from 2 layers of turkish towel.

properties of the Hydrocollator Pack and the turkish toweling provides a striking comparison as to the value of these two methods of applying moist heat. By this study we also demonstrated that the Hydrocollator Pack retains its heat sufficiently longer than the duration of our average treatment of 20 minutes. This was also accomplished with one pack rather than by the need of reheating and reapplying hot packs for the duration of treatment.

The patient's response was checked by a questionnaire. The patients selected for this questionnaire were those who had had previous postpartum care with the use of other forms of perineal heat therapy. Two hundred patients were questioned concerning their experience with previous heat therapy and their preference for the use of the Hydrocollator Pack. The previously used forms of heat therapy were the heat lamp, conventional hot soaks and Sitz baths. Of the 200 patients questioned, 61 had used all the forms of heat therapy previously. The results of this questionnaire indicated that of the patients surveyed, 175 preferred the Hydrocollator Pack, 3 preferred conventional soaks, 14 preferred the heat lamp, 3 preferred the Sitz baths and 5 were undecided. The 61 patients having previously received all forms of perineal heat preferred the Hydrocollator Pack Unit.

The nursing personnel believes the Hy-

drocollator Units are advantageous. There seem to be fewer calls by the patient with this unit than with the other forms of therapy. The patient utilizing the Hydrocollator Steam Pack, requires less assistance by the aides, and the type of assistance is less time-consuming. When heat cradles were used, the patient required help to be placed on and off the apparatus. Sitz baths required considerable time on the part of the aide personnel, to be with the patient and assist her during the course of treatment.

#### Discussion and Summary

A Hydrocollator Pack has been modified for OB. postpartum use and perineal therapy. Properties of heat retention, demonstrated by this pack, permits single applications of moist heat therapy. The ease of which the pack can be applied and held in place with an ordinary sanitary napkin belt, seems to be an improvement over other forms of heat therapy. The heat properties were tested objectively with a recording thermocouple apparatus which demonstrated the ability of this commercial pack to absorb and slowly release the heat, al-

lowing for a 20 to 30 minute application of moist heat. Patients' preference was overwhelmingly demonstrated through a questionnaire to patients having had previous deliveries and treatment with perineal heat by other forms of applications.

The experience with the use of the Hydrocollator Pack on our Obstetrical Service has been highly successful. It is believed this may represent an improvement over other forms of perineal heat therapy whenever moist heat is desired.

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#### Prevention of Subacute Bacterial Endocarditis Associated with Dental Procedures: Gould, L. and Sperber, R. J. *Am. Heart Jour.* 71: 134, 1966.

From 50 to 80% of patients who have dental extractions or extensive dental procedures develop bacteremia. The organism responsible is *Streptococcus viridans*. Consequently, the recommendation has been to give penicillin just before, and for 2 days after the dental procedure. Recent reports, however, indicate that many patients on penicillin prophylaxis for prevention of recurrent rheumatic fever harbor *Str. viridans* resistant to penicillin. This necessitates a revision of the previous recommendations.

Patients on long term penicillin prophylaxis should be treated either by, (1) stopping penicillin long enough for blood levels to be absent for

one week, and then administering 600,000 units procaine penicillin intramuscularly an hour before the dental procedure and on each of the succeeding 2 days; or (2) by adding erythromycin 250 mg. by mouth 4 times daily, beginning 6 hours prior to the dental procedure and continuing for 3 days. All other patients with rheumatic heart disease, syphilitic aortic valve disease, or congenital heart disease should receive 600,000 units procaine penicillin intramuscularly an hour before the dental procedure and on the 2 succeeding days, except for those who are allergic to penicillin. Patients who cannot take penicillin should be given erythromycin 250 mg. 4 times daily beginning 6 hours prior to the dental procedure and continuing for 3 days. (Abstracted for the Middle Tennessee Heart Association by James Snell, M.D., Nashville.)

## CASE REPORT

### Venous Congestion as a Probable Cause of Abruptio Placenta\*

Lawrence White, M.D.,† Nashville, Tenn.

I wish to review briefly abruptio placentae, and to report an interesting patient, observed recently at the Nashville General Hospital, who had an abruptio placenta associated with varicosities and pelvic congestion. Then I will review Mengert's observation on the pathogenesis of premature separation of the normally implanted placenta.

Whenever the normally located placenta separates from its uterine attachment between the twentieth week of pregnancy and term, the condition is known as abruptio placenta. This condition has been known by many names, two being ablatio placenta and premature separation of the placenta. It was described by Rigby who called it accidental hemorrhage. Paul Portal in his comparison of abruptio placenta with placenta previa described the latter as unavoidable hemorrhage.

The incidence of abruptio placenta seems to be about one in 500 pregnancies for the complete type, and about one in 250 pregnancies for the incomplete type.

The primary cause of abruptio placenta is unknown, but some of the conditions that have been evoked as etiologic factors are trauma, shortness of the umbilical cord, chronic hypertension, acute toxemia, and pressure by the enlarged uterus on the inferior vena cava. Rupture of the membranes in cases of hydramnios with the sudden reduction of the volume of the uterus has also been given as a cause of placental separation, and also after delivery of the first of twins.

An even more recent theory of a defect in folic acid metabolism, especially during the first trimester of pregnancy has been proposed as an etiologic factor in abruptio placenta.

\*Read at the meeting of the Tennessee Obstetrical and Gynecological Society, April 18, 1966, Gatlinburg, Tenn.

†From the Department of Obstetrics and Gynecology, Nashville General Hospital, Nashville, Tenn.

The diagnosis in the more severe cases is made on the signs and symptoms of a sudden onset of acute abdominal pain, and a sudden increase in the size and tenderness of the uterus with a tense abdominal wall. Absence of fetal heart tones, the general symptoms of increasing anemia, fall in blood pressure, and deepening shock usually follow in rapid succession. There may or may not be some external hemorrhage.

In the differential diagnosis,—rupture of the uterus, abdominal pregnancy, ruptured uterine varix, torsion of the uterus, and placenta previa are some of the conditions to be considered. The diagnosis of abruptio placenta is commonly confused with placenta previa, although these two entities should present no problem in differentiation since they usually present different clinical pictures. The onset of abruptio placenta is usually sudden and stormy; in placenta previa it is quiet. Abruptio is accompanied by severe pain; previa is without pain unless uterine contractions are present. Hemorrhage with abruptio is internal first, then may become external and severe, and is further characterized usually by one hemorrhage. Hemorrhage from previa is external, mild, and occurs several times. The hemorrhage with abruptio is continuous and may sometimes cease with uterine contractions, whereas with previa the hemorrhage is usually increased with uterine contractions. The uterus with abruptio usually is tense and tender; with previa it is soft and nontender. The fetal heart tones are not affected by placenta previa, but are altered by abruptio.

#### Case Report

A recent case of abruptio placenta at the Nashville General Hospital is of interest because the abruption was predicted approximately one hour prior to its occurrence.

The patient was a 34 year old, white, obese woman, gravida 5, para 4, abortions 0, whose expected date of confinement was Dec. 31, 1965.

She was first seen in our prenatal clinic on June 7, 1965. Pertinent findings then were limited to the pelvis and lower extremities. Evidence of moderate pelvic relaxation and a uterus of approximately 10 to 12 weeks gestation was found on pelvic examination. Marked varicosities of the vulva and both lower extremities were pre-

sent, more marked on the left. (The observers described these as the most marked varicosities they had ever seen.) It was recommended that the patient wear supportive hose and that she elevate the legs at regular intervals. Her course was followed periodically in the out-patient clinic. In November, the patient was found to have slight pretibial edema and was placed on a low-salt diet which she did not follow. On Dec. 12, the patient was found to have gained 6 pounds in 5 days, had 2+ pitting, pretibial edema, and without albuminuria. The B.P. which had previously been normal was now 164/100.

The patient was admitted for treatment and within 72 hours had lost 14 pounds and had become normotensive.

On the 3rd hospital day, while discussing the treatment and condition of the patient with Dr. Frank Whitacre, he mentioned the possibility of abruptio placenta developing in this patient because of the findings of Mengert, Howard, and Goodson on the production of abruption of the placenta from venostasis due to compression of the vena cava. In less than an hour afterward, one of the house officers was called to see the patient because she was complaining of a sudden onset of lower abdominal pain and vaginal bleeding. The patient had soaked a large area of the bed with blood, and blood was oozing from the vagina. The uterus was quite tender and irritable. The fetal heart rate was 148. The patient was covered with cold perspiration, the P. was 88, and the B.P. 120/80. She was immediately taken to the operating room for a low cervical cesarean section with delivery of a 9 lb. 4 $\frac{3}{4}$  oz. female infant. The uterus was found to be quite congested. The placenta was partially detached and a dark clot of approximately 5 to 6 cm. in size was attached to the maternal surface of the placenta.

The infant required extensive resuscitation, but improved rapidly over the next 1 to 2 hours, and presently is doing well.

### Discussion

As has been mentioned previously Mengert and associates<sup>1,2</sup> have shown that venostasis can cause abruption of the placenta. During their animal experimentation on the etiology of the supine hypotension syndrome in pregnancy, placental abruption occurred in one of the dogs after ligation of the vena cava. Because of the clinical implications of this occurrence, further experiments were undertaken to ascertain whether this phenomenon was accidental or represented a consistently recurring phenomenon. In 4 dogs, in the second or third trimester, ligatures were placed around the

vena cava below the level of the renal veins and about the left ovarian vein. After timed intervals of venous obstruction, varying from 5 to 60 minutes, each dog was sacrificed and representative areas of the uteroplacental junctions were studied histologically.

Observation of the uteri during the procedure showed gross engorgement, and after sacrifice of the animals and opening of the uteri, evidence of abruptions were seen on 22 of 24 of the placentas. The areas of abruption varied in size from 1 to 2 mm. to 1 to 1.5 cm.

After observing the findings in these animal experiments, Mengert and collaborators decided to take a step further. Two multiparous patients at term who were in need of a cesarean section were selected. In each patient, at the time of the cesarean section, a point below the entry of the renal veins was selected and the vena cava was completely occluded by digital compression for 5 minutes. The aorta was not compressed. The entire uterus became congested especially at the site of the placental attachment. After 3 minutes this site became distended and elevated above the surrounding uterine wall. At the end of 5 minutes compression of the vena cava was released and the section was carried out; both infants were resuscitated and did well. One of the placentas was almost completely separated from its attachment with a large amount of dark red blood flowing out from behind the placenta. The placenta of the second patient was partially detached from its site and a dark clot was demonstrated behind the placenta.

It is probable that venous congestion associated with abruptio placenta, is more common than is appreciated. It is known that compression of the vena cava may cause separation of the placenta. When a patient is near term and has severe varicosities, it is probably not wise for the patient to lie on her back, and thereby add to the possibility of compression of the vena cava.

We believe that this case is illustrative of the problem and should be brought to the attention of those doing obstetric practice.

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**SEPTIC SHOCK—PATHOGENESIS AND TREATMENT.** Weinstein, Louis and Klainer, Albert S. New England J. of Med., 950, 1966.

The very perplexing problem of shock with sepsis has been the subject of research for many years, but only recently has enough been learned to aid management of the patient. Weinstein and Klainer review much of the evidence and translate it into logical methods of treatment.

Septic shock is a dynamic process caused by various infections resulting in inadequate perfusion of tissues. Bacteremia may not occur as the syndrome may be due to endotoxin, exotoxins and direct bacterial invasion. It usually occurs with urinary, intestinal, or biliary tract surgery or cirrhosis, diabetes, burns, malignancies and corticosteroid treatment. The most frequent organisms are *E. coli* and *Pseudomonas*. Prior to present management the syndrome was fatal in 40 to 80%.

At first "warm shock" appears, but if allowed to continue "cold shock" ensues. There are three types of hemodynamic abnormalities, any one of which, or a combination of all three, may be present. These are cardiac failure, blood volume deficit and peripheral vascular failure. Initially, there is spasm of both the arterioles and muscular venules which increases blood flow to the essential organs and lowers capillary hydrostatic pressure. Within hours the arterioles lose their tone while the venous tone is maintained, thereby flooding the capillaries and reducing the effective volume flow.

If the preventive measures of treating the infection early and avoiding indwelling catheters fail, airway obstruction and blood loss must be ruled out. When this is done a small polyvinyl catheter is placed in the median basilic vein and passed into the superior vena cava or right atrium.

The position of the catheter can be approximated by the length of the catheter. A 3-way stopcock with a manometer is then attached. If the central venous pressure is less than 5 cm. of water, whole blood or plasma is infused until the pressure rises 8 to 12 cm. If the blood pressure does not rise at this time, there is probably the fact of decreased cardiac output present. They consider then the treatment of choice to be isoproterenol-1 mg. of the drug dissolved in 500 cc. of D5W at a rate of 1 to 2 mcg. per minute. This is to stimulate the beta adrenergic receptors to increase the rate and force of the contraction of the heart. At this time, rapid digitalization may be helpful and probably should be done.

If these procedures fail, the use of vasodialating agents are tried. The main one they use for this purpose being Dibenzyline.

They feel that corticosteroids may have some beneficial effect given 500 mg. of hydrocortisone every 4 to 6 hours for 48 hours. After blood cultures are drawn, they recommend the giving of kanamycin or the combination of streptomycin (1 Gm. intramuscularly daily) and large doses of chloramphenicol (4 to 6 Gm. intravenously per day).

Vasopressor agents are rarely used; then only when blood pressure is unrecordable. This is in the form of metaraminol (Aramine) so that the pressure will rise to 35 to 40 mm. of mercury. They no longer use Levophed. Finally, they do not believe oxygen is of any value as septic shock is the static type rather than the anoxia type. Antihistamine, hypothermia, aldosterone, heparin and a number of other drugs are of dubious value. (Abstracted For The Tennessee Heart Association by William G. Fuqua, M.D., Columbia, Tenn.)

**STAFF CONFERENCE****Nashville Veterans Administration Hospital\*****Intracerebral Hematoma**

DR. CHARLES E. WELLS: The patient for discussion today will be presented by Dr. Alexander C. McLeod.

DR. ALEXANDER C. MCLEOD: This was the first admission to the Nashville Veterans Administration Hospital for this 50 year old man who entered on Jan. 10, 1966, complaining that he had suffered a "stroke." Approximately 14 days prior to admission, he suddenly developed nausea and headache followed within a few minutes by paralysis of his left arm and leg. He did not lose consciousness, nor was he at any time unresponsive. Maximal weakness of the left arm and leg developed within a very short time, and he had thereafter shown some improvement. At the time of admission he said he was considerably stronger than on the day the episode occurred. He had remained conscious and communicative throughout his illness.

Past history revealed that the patient had retired from his job as a truck driver at age 43 because of hypertension. Subsequently he had been followed by his private physician because of hypertension, episodes of chest pain radiating to the left arm, and episodes of nocturnal dyspnea. He had experienced no neurological symptoms previously.

In July of 1965, he had been admitted to another hospital because of dyspnea. At that time a blood pressure of 250-140 had been discovered, associated with cardiac enlargement. Laboratory studies revealed a slight anemia and bilateral renal dysfunction. During that hospitalization, he was placed on a low salt diet and given digitalis. His blood pressure was relatively well controlled on reserpine and Guanethidine. On this therapeutic regimen, diastolic blood pressure recordings between 90 and 100 were obtained. He had continued on these medications until the onset of the episode which necessitated his hospitalization.

On admission, general physical examination revealed a B.P. of 190/130 and enlargement of the heart to the left of the midclavicular line with a grade II/VI systolic murmur along the left sternal border. On neurologic examination, the patient was alert and oriented. He responded appropriately though slowly to questioning. There was conjugate deviation of the eyes to the right. Examination of the ocular fundi revealed bilater-

al blurring of the disk margins but no other definite evidence of papilledema. A large number of fresh retinal hemorrhages were noted bilaterally. The corneal response was diminished on the left as compared with the right. Motor function of the right arm and leg was normal. There was severe flaccid weakness of the left upper and lower extremities. Muscle stretch reflexes on the left side of the body were slightly less brisk than those on the right. The superficial abdominal reflex was brisk on the right, but none could be obtained on the left. The left plantar response was abnormal. No definite sensory abnormality could be demonstrated.

Admission laboratory studies included a normal hematocrit, WBC., and differential. The urine contained 3+ albuminuria, 2+ glycosuria, 15 to 20 WBC. per h.p.f., 8 to 12 RBC. per h.p.f., and many bacteria. BUN. was 45 mg. per 100 ml. on admission. The serum electrolytes, calcium, and phosphorous were within normal limits. Serum uric acid was 11.8 mg. and serum creatinine, 2.65 mg. per 100 ml.

At the time of admission, we believed the patient had most likely had a right cerebral hemispheric vascular accident secondary to his severe hypertension.

On the day of admission, a lumbar puncture was performed. The opening pressure was 420 mm. The spinal fluid was amber in color and clear. Microscopic study revealed 400 crenated RBC. and a protein of 230 mg. Chest x-rays revealed cardiac enlargement. Following admission, the patient was begun on antihypertensive medications.

On the patient's 2nd hospital day, when he was seen by the attending physician, he was poorly responsive, staring around uncomprehendingly most of the time, without voluntary conversation. When questioned, he stated that his eyes ached and that he had a mild headache. He was oriented and followed directions fairly well, but he was markedly lethargic and uninterested in his surroundings. It was thought that he had a left homonymous hemianopsia, though this could not be demonstrated with certainty. The ocular fundi showed blurred optic disks with absence of the normal optic cups and absence of venous pulsations bilaterally. There were prominent exudates and hemorrhages bilaterally, some large enough to suggest subhyaloid hemorrhages. The right pupil was very slightly smaller than the left but both responded well to light. The left corneal response was diminished. There was a moderate left facial weakness of the upper motor variety and flaccid paralysis of the left arm. There was fairly good movement of the left leg, though the strength was markedly less than that of the right. The left knee jerk was now slightly more active than the right; otherwise, no significant asymmetry of the muscle stretch reflexes was obtained. There was an absent plantar response on the left and a downgoing response on the right.

Because of the unusual and striking deep am-

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ber color of the spinal fluid, the possibility of primary intracerebral hemorrhage, primary subarachnoid hemorrhage due to an aneurysm, or primary subdural hematoma was raised. It was recommended that the nature of the pigment be determined and that the patient's neurologic status be followed closely in succeeding days. If the patient did not improve clinically, right carotid arteriography was proposed.

Over the succeeding 5 days, the patient was carefully observed and evaluated. Diminished renal function was demonstrated, and urine cultures grew *Proteus* organisms. Attempts were continued to control his blood pressure with drugs. Repeat spinal fluid examination disclosed amber-yellow fluid with a normal opening pressure and 163 cells (96% of RBC, and 4% polymorphonuclear leukocytes). Bilirubin could not be demonstrated in this spinal fluid specimen but methemoglobin was demonstrated with certainty. Repeat skull x-rays revealed a slight shift of the pineal body to the left. (Fig. 1.)



FIG. 1. Pineal is shifted from right to left. Arrow indicates Pineal.

The patient failed to improve and on his 7th hospital day, right carotid arteriogram was performed revealing a mass in the right hemisphere. (Fig. 2.) On the 10th hospital day, craniotomy was performed by Dr. Karl Jacobs, and an intracerebral hematoma of approximately 35 cc. was evacuated from the right temporal region. The patient tolerated the procedure well.

During succeeding weeks, the patient showed rapid neurologic improvement. Strength im-

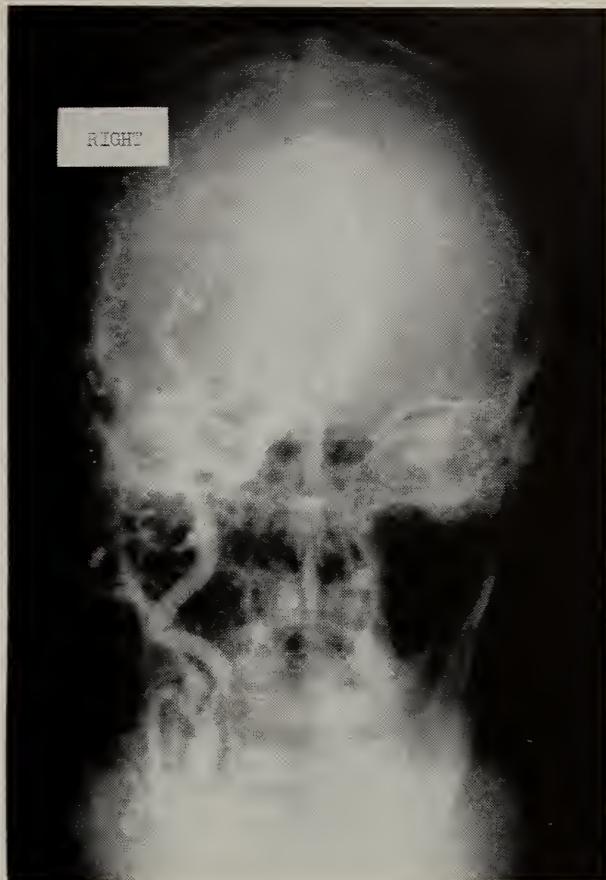


FIG. 2. Right carotid arteriogram. Note marked shift of anterior cerebral artery to left.

proved markedly on the left side, and by the time of discharge he was able to stand and to walk with ease. He could also use his left hand and arm quite well, though some slight weakness in the left arm persisted. He remained somewhat dull mentally. During this postoperative period, his urinary tract infection cleared, and hypertension was adequately controlled with medications. He was discharged markedly improved.

**DR. WELLS:** This patient aroused a great deal of interest in us from several standpoints. First of all, he was only 50 years of age, yet he suffered from serious hypertension with evidence of renal impairment and secondary enlargement of his heart. Secondly, despite his relative youth, he obviously had severe dysfunction of his right cerebral hemisphere. At the time of admission, one could be quite certain on the basis of the history and of the abnormalities demonstrated on neurologic examination that this man had had a cerebral vascular accident involving the right cerebral hemisphere. The question remained, however, as to the nature of the stroke and as to whether any definitive therapeutic procedures might benefit him.

Even without knowing the results of any laboratory procedures, it was logical to think that he might either have infarcted a portion of the right cerebral hemisphere by occluding the right middle cerebral artery or have destroyed a portion of that hemisphere by hemorrhaging from this artery or from one of its branches. The history of abrupt onset with subsequent improvement was certainly most characteristic of occlusive vascular disease. When intracerebral hemorrhage occurs it is usually a catastrophic event, and most commonly the patient loses consciousness at the outset. Even if he rouses subsequently, seldom does one see much evidence of clinical improvement so far as increase in strength and motility is concerned. Intracerebral hemorrhage is in general perhaps the most devastating variety of cerebral vascular accident which man experiences—and the appreciable improvement in this patient's clinical state prior to his admission to the hospital here made this diagnosis seem unlikely. On the other hand, a severe headache along with nausea at the onset is unusual with ischemic vascular disease, and it pointed us somewhat toward a diagnosis of intracranial hemorrhage.

As soon as the spinal fluid was examined, it was obvious that there had been bleeding within the cranium. Only a few red blood cells were seen in the spinal fluid, but the fluid was deep amber in color, actually of a most unusual hue. With this finding to support us, several questions arose. Could he perhaps have a subdural hematoma accounting for the weakness and for the xanthochromia? Could he perhaps have suffered an intracerebral hemorrhage, with rupture of the hemorrhages into the cerebral ventricles resulting in xanthochromic spinal fluid? Could he perhaps have suffered a subarachnoid hemorrhage from rupture of an aneurysm, with subsequent infarction of the right cerebral hemisphere distal to the aneurysm? Lastly, might he possibly have had a primary intracerebral hemorrhage with hematoma formation, the amber color of the spinal fluid being secondary to diffusion of pigments from this hematoma into the cerebral spinal fluid?

On clinical grounds, the first two possibil-

ties that I mentioned seemed unlikely. Subdural hematomas almost never appear abruptly except following rather serious cranial trauma. There was no history of trauma in this man. When they appear in their usual insidious fashion following some fairly trivial cranial trauma, they seldom produce the striking focal abnormalities noted in this individual. Therefore on clinical grounds we felt this an unlikely possibility. Primary intracerebral hemorrhage, secondary to hypertension, with subsequent rupture of the hematoma into the ventricles, would be a definite possibility, but patients usually lose consciousness with rupture of blood into the cerebral ventricles, and death or severe disability is almost the invariable consequence. The fact that this patient had never lost consciousness, and that actually he had improved since onset seemed to make this an unlikely choice.

We thus were led to consider the third and fourth possibilities mentioned previously as being the most likely diagnostic possibilities. While subarachnoid hemorrhage from an aneurysm does not usually result in striking focal neurologic defects, at times the aneurysm ruptures into the substance of the brain, or at times there is infarction from occlusion of the vessel near the site of bleeding. Thus this might have provided an adequate explanation for this patient's clinical course. Primary intracerebral hematomas are rare, but they are known to occur. Furthermore, it has been reasonably well established that removal of these hematomas neurosurgically may result in striking clinical improvement. Since aneurysms and intracerebral hematomas are among the rare varieties of "strokes" which can be treated, it became important in this instance to know the exact nature of the cerebral vascular accident which had occurred.

Skull x-rays demonstrated a shift of the pineal gland to the left, suggesting enlargement of the right cerebral hemisphere, but this did not give us the answer. Swelling in the right cerebral hemisphere might have been secondary either to infarction with surrounding edema or to a hematoma—thus the skull x-ray did not make the diagnosis.

We then considered whether an investi-

gation into the nature of the cerebral spinal fluid pigment might be of value—and it proved to be of great value in this patient.

It has been well demonstrated in the past that after bleeding occurs into the subarachnoid space, the red cells are gradually destroyed. The liberated hemoglobin is then progressively broken down, first to oxyhemoglobin, subsequently to bilirubin. Thus after either primary subarachnoid hemorrhage or intracerebral hemorrhage with rupture into the ventricles, one would expect to find oxyhemoglobin or bilirubin in the spinal fluid. As late as 2 weeks after the hemorrhage, most of the pigment will be bilirubin, since oxyhemoglobin is prominent only in the early stages of breakdown. Methemoglobin does not ordinarily appear following bleeding into the subarachnoid space. Methemoglobin may, however, be found both within subdural hematomas and within intracerebral hematomas. Thus, we predicted that if the amber pigment coloring this man's spinal fluid proved to be methemoglobin, it would strongly support the diagnosis of an encapsulated intracerebral hematoma with diffusion of pigment into the spinal fluid, whereas the demonstration of bilirubin alone would suggest one of the other diagnostic possibilities.

We asked our colleagues in the Division of Hematology to analyze this spinal fluid. They were unable to show the presence of bilirubin but were able to demonstrate with certainty the presence of methemoglobin. Thus we predicted that this patient probably had an encapsulated intracerebral hematoma.

Subsequent carotid arteriogram demonstrated the presence of the mass; and at surgery, a large intracerebral hematoma was evacuated with subsequent improvement in the patient.

Thus, in this patient the determination of the spinal fluid pigment allowed us to predict with some certainty the nature of the underlying disease process. In this man such a differentiation was of major importance. As I have already mentioned, although encapsulated intracerebral hematomas are rare, it is important that they be

diagnosed, for their removal frequently leads to striking clinical improvement.

In summary, this man appeared complaining that he had suffered a "stroke." As with any other patient who presents similarly, we tried first to demonstrate the site of his neurological lesion, next to demonstrate its nature. It was relatively easy on the basis of our neurologic examination to localize his lesion to the right cerebral hemisphere. It was much harder to demonstrate the nature of the lesion. As always, our aim was to find a treatable lesion if one were present—and in this man a series of clinical and laboratory studies led us to the discovery of an intracerebral hematoma. Subsequent removal of the hematoma led to striking clinical improvement.

**DR. PETER NEW:** Is the technic for demonstrating spinal fluid pigments a fairly standard one?

**DR. WELLS:** No, it isn't. The presence of methemoglobin within the depths of a subdural or intracerebral hematoma has been known for a long time, as has the progressive breakdown of blood in the subarachnoid space first to oxyhemoglobin and then to bilirubin. To my knowledge, however, this has been used very little as a diagnostic procedure. In this instance, perhaps we were just lucky, but certainly it proved to be quite valuable to us. You could argue, of course, that we would have demonstrated the same thing by arteriography alone, and that is certainly true. Nevertheless, it's good to be able to suspect what is going to be seen with arteriography, since in some instances this might actually lead to the decision to perform the arteriogram.

**QUESTION FROM AUDIENCE:** What is this man's prognosis?

**DR. WELLS:** Probably not too good. He made a nice though incomplete recovery from this cerebral vascular accident, but this man is severely ill with hypertension and renal dysfunction and certainly we would not expect his future to be a particularly bright one. The chance of his having another cerebral vascular accident is high, particularly if his hypertension cannot be well controlled.

## CLINICOPATHOLOGIC CONFERENCE

### Baptist Memorial Hospital

#### Thrombotic Thrombocytopenia\*

This 27-year-old woman was hospitalized on Oct. 30, 1965, because of anemia, gross hematuria, and severe respiratory distress. At the time of the onset of her present illness the patient was approximately 8 months pregnant. She had had no difficulty during her pregnancy, and there had been no elevation of the blood pressure nor albuminuria. She was not receiving medications other than vitamins.

On Oct. 21, the patient was seen by her physician because of severe nausea, vomiting, and mild diarrhea. No blood noted in the bowel movements. She was having some vague abdominal pain, but this was not severe. It was thought that the patient most likely had a viral enteritis and she was treated symptomatically. Later that day, however, the symptoms increased in severity and she continued to have severe nausea and vomiting. Chest pain developed bilaterally which was never clearly described; her husband noted that she was somewhat short of breath at this time.

She was hospitalized in her home town because of the symptoms. She was found to be mildly dehydrated and was given I.V. fluids and symptomatic medication for the nausea and vomiting. The BUN was found mildly elevated, and it was thought this was most likely secondary to dehydration. She improved considerably soon after admission.

On Oct. 22, however, the patient was observed to be markedly jaundiced, a finding which had not been present at the time of her admission the day before. The HCT., which had been 37% on the day of admission, had fallen to 22%. The stools were negative for occult blood. The patient was given transfusions with improvement, and after several days, the jaundice began to subside.

On Oct. 24, the patient went into labor and had a stillborn infant. There was no gross evidence of infection at the time of delivery. Following this, the patient seemed to improve somewhat. The nausea and vomiting had now completely disappeared and she no longer had diarrhea. The patient had had fever but the T. was returning toward normal levels. However on Oct. 29, she again became worse. She developed marked shortness of breath and complained of diffuse discomfort in her chest. Gross hematuria was present for the first time and she was passing large amounts of dark-red blood per rectum. She became very pale and developed a marked tachycardia. In spite of further transfusions the pa-

tient's general condition did not improve and on Oct. 30, she was transferred to Baptist Memorial Hospital. Prior to the transfer, she had received a total of 12 units of whole blood.

Detailed review of systems revealed that the patient generally had enjoyed excellent health in the past and had had no significant illnesses. She had complained from time to time of mild arthralgia in the hands and wrists, but there had never been swelling of these joints nor signs of acute inflammatory changes.

Physical examination upon admission revealed the patient to be acutely and severely ill. Rectal T. was 99°, the B.P. 150/70, the P. rate 120, and R. were 60/min. She was of normal development and well nourished, and did not appear to be chronically ill. However, she was in severe, acute distress with rapid, shallow respirations. There was mild jaundice and many bruises were seen at the sites of venipunctures. The mucous membranes were pale; there were one to two small petechiae over the soft palate but peripheral petechiae were not seen. Percussion note was resonant over both lung fields. There were inspiratory rales in both lung bases and many rhonchi could be heard throughout both lung fields, perhaps more marked on the left. The heart did not appear to be enlarged. There was a blowing, systolic murmur heard diffusely over the precordium but no diastolic murmurs were heard. There was a triple rhythm heard at the apex, which was thought to represent a presystolic gallop rhythm. The neck veins were not distended and the peripheral pulses were good. The abdomen was soft and symmetrical. There was notable tenderness in the RLQ with mild rebound tenderness being apparent. No muscle spasm was noted. The bowel sounds were normal. Neurologic examination was within normal limits.

On Oct. 30, the Hgb. was 12.9 Gm. and the HCT. 38.5%; red cell indices were normal. Reticulocytes were 4.5% and the E.S.R. was 15 mm/hr. The WBC. count was 17,400 with 1% myelocytes, 1% metamyelocytes, 4% bands, 84% PMN, 6% lymphocytes, and 4% monocytes. Phase platelet count was 43,000, later falling to 12,000. The red cells showed moderate anisocytosis. There were many spherocytes on the smear and many bizarrely-formed red cells were noted with schistocytes and other fragmented forms. There was moderate, diffuse basophilia. Urinalysis revealed the urine to be grossly bloody with a pH of 5.0 and a specific gravity of 1.013. There was a 3+ protein and no glucose in the urine. The RBC. were too numerous to count and there was 20 to 25 WBC. per hpf. On examining the fresh specimen, many granular casts were seen. Plasma urea nitrogen on Oct. 30 was 44 mg.%. A hemorrhagic study performed on this day revealed no abnormalities except the thrombocytopenia. The clot was observed and no evidence of increased fibrinolytic activity was noted. A bone marrow examination was performed on this same day; there was no evidence of leukemia. The only marrow

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abnormality was erythroid hyperplasia which was believed consistent with her acute hemolytic episode. An EKG. showed nonspecific ST-T wave changes and a sinus tachycardia. Chest x-ray on Oct. 30, showed diffusely increased markings throughout both lung fields, which were thought to be due to pulmonary edema. The heart did not appear to be enlarged. There was a small amount of fluid noted in the left costophrenic angle.

Serum electrolytes on Oct. 30, showed no deviation from normal. Three blood cultures obtained on the day of admission were sterile. Coombs test was negative. An LE preparation was also negative. On Nov. 1, the total bilirubin was 3.1 mg.% with a direct of 1 mg.% and indirect of 2.1 mg.%. The SGPT was 20 units and alkaline phosphatase was 9 K-A units. Culture and smear of the bone marrow for acid-fast bacilli and fungi were negative. Serum electrophoresis revealed a gamma globulin of 8.6% of the total and a beta II globulin of 7.1% of total. The beta I globulin was 10%, alpha II—12.8%, alpha I—8.5%. Albumin was 53% of the total. Total protein on this determination was 4.7 Gm.%.

After appropriate cultures were obtained, the patient was begun on large doses of Staphcillin, intravenous penicillin, and streptomycin. She was also begun on Solu-cortef, the initial dosage being 300 mg. I.V. daily, and this dosage was later increased to 600 to 800 mg. I.V. daily. She was digitalized over a 24-hour period. Intermittent positive pressure breathing was given 4 times daily, and oxygen was administered by tent. Within a few hours, the patient's pulse fell to the 115 to 120 range. She continued to be very short of breath, however, and had one episode of severe respiratory distress which was relieved by the administration of aminophyllin and hydroxyzine (Vistaril).

Early on the morning after admission, the patient had a tarry stool and this was repeated several times during the remainder of her life. By about 10 a.m. on Oct. 30, the patient was quieter and fewer rales were noted in the lung fields. The cardiac rate was 120 and no definite gallop could be heard. B.P. remained stable, but R. remained in the range of 40-60/min. By the evening of Oct. 31, the patient appeared essentially unchanged, and a repeat chest film showed no changes from the previous ones. The heart size remained normal. On the night of Oct. 31, the patient developed marked respiratory distress unaccompanied by stridor, but over a period of about 30 minutes there developed massive swelling of the parotid and submandibular glands.

On the morning of Nov. 1, the patient was remarkably improved. The parotid and submandibular swelling had subsided; the P. was now 100 and R. 32. The chest was much clearer to auscultation. She did well the remainder of the morning, but at 1:45 p.m. she had a grand mal seizure. Neurologic consultant found no evidence of mas-

sive intracranial hemorrhage. The patient, however, had a left homonymous hemianopsia.

The urine output remained good. BUN. remained in the 50 mg.% range. She had some return of her visual acuity, but on Nov. 2, inability to see and some weakness of the right facial nerve was present. She became confused for the first time on this day. The HCT. fell and subsequently several units of packed cells were given with continued evidence of gastrointestinal bleeding and continued severe gross hematuria. She also developed hemoptysis.

The patient's confusion became more marked and she remained restless and uncooperative. On Nov. 5, she had another generalized seizure; she was able to move all extremities after this seizure but remained completely disoriented. The antibiotic therapy was discontinued but she was continued on the large doses of Solu-cortef and blood as necessary. Late in the afternoon of Nov. 5, the patient developed a very weak pulse for the first time and had a resumption of her tachycardia in the 160 range. She became unresponsive, cold, and clammy; the blood pressure fell. She did not respond to metaraminol (Aramine) or whole blood and expired shortly thereafter.

DR. J. D. UPSHAW: The case will be discussed by Dr. Burt Friedman.

DR. BURT FRIEDMAN: In the CPC discussions, there are various approaches one may take in attempting to reach a reasonable conclusion. In this particular case, one might approach the problem by considering whether or not this is a neoplastic disease, a congenital disorder, an infectious disease, or possibly a degenerative abnormality. However, I prefer to look at this case from the standpoint of a system involvement. With that in mind, as one reads this protocol, I think he is impressed that the systems involved is diffuse. Multiple organs are involved, namely, the heart, kidneys, lungs, brain, skin, and mucous membranes. It would appear that one has primarily to deal with two systems, namely, the nervous and the vascular. Although there is evidence of nervous system involvement, it would appear that such involvement is not the primary problem. One is left with an analysis of the case from the standpoint of the vascular system.

Proceeding then, we have a young white woman who died within 2 to 3 weeks from the apparent onset of her illness, and some 7 days after being admitted to this hospital. At the time of her present illness she was 8 months pregnant. I suspect the pregnancy

is just a coincidental phenomenon since there had been no elevation of the blood pressure or proteinuria to suggest that she might have had toxemia which could have involved her vascular system. I think it would be proper to eliminate pregnancy as an etiologic association.

Then after having been admitted to the hospital with anemia, gross hematuria, and severe respiratory distress, she developed nausea, vomiting, and diarrhea which later became a bloody diarrhea. She soon developed bilateral chest pain which was never clearly described, and was quite short of breath.

The laboratory findings included an elevated plasma urea nitrogen which at that time could have been a factor contributing towards her dehydration or even a result thereof. Then it was noted on Oct. 22, which was some 8 days before she was admitted for her terminal illness, that she had jaundice, which finding had not been present at the time of her admission the day before. The hematocrit which had been 37% on the day of admission fell to 22%; this fall occurred in the absence of obvious bleeding. One then may assume that this patient had had a hemolytic phenomenon, and I think it is fair to assume this is what happened on repeated occasions.

Then on Oct. 24, she went into labor and had a stillborn infant. It is recorded that there was no evidence of infection at delivery, and that the nausea and vomiting had completely disappeared as well as the diarrhea. She had been febrile all along, but her temperature returned to normal. On Oct. 29 she became worse after having a normal temperature. The dyspnea increased and she had marked discomfort in her chest. Hematuria was noted for the first time. She became pale, had a marked tachycardia, and was given blood transfusions in an effort to correct this abnormality.

I would like for Dr. Booth to describe the chest films and I will try to fit them into the clinical picture.

DR. J. L. BOOTH: As you will note this patient had four chest films; one was made on the date of admission, Oct. 30. This film shows the heart of normal size and contour, scattered fluffy infiltration is seen through-

out both lung fields but no fluid. This finding is suggestive of pulmonary hemorrhage or pulmonary edema. In view of the history of bleeding in the urinary and G.I. tracts, this very likely represents some hemorrhage into the lungs.

On Oct. 31, the patient is still short of breath; we see even more infiltrate and this again could represent pulmonary hemorrhage. No fluid is seen. On Nov. 1, the chest film showed clearing of the pulmonary infiltrate. At this time the patient was clinically much better and the lung fields were clear. A final x-ray film was made on Nov. 3, or 2 days before death and at this time the lung fields had cleared almost completely. The heart size is difficult to evaluate because it was a short portable film technic. No evidence of cardiac enlargement is seen during this period of study.

DR. FRIEDMAN: With regard to the roentgen appearance of the lungs possibly being due to uremia, I would think that the blood urea nitrogen is not quite high enough for this to be the etiologic process. Furthermore, it does not have the roentgen appearance of uremic lung disease. I think we usually see uremic disease in patients who are more or less in terminal uremia with blood urea nitrogens over 100 mg.%. The lungs exhibit a patchy diffuse exudate and this with clinical hemoptysis suggests that she is bleeding into the interstitial and intra-alveolar spaces of the lungs which is the basis upon which I am predicated my discussion. I do not think it is an inflammatory reaction of the lungs, nor do I think it is congestive heart failure. The normal-sized heart is against its being due to congestive failure. The patchy densities are too peripheral also, and the hilar densities are not dense enough to go along with a congested lung. On the other hand, I think the pulmonary changes represent an active process, but I do not think it is inflammatory, but rather an active exudation of blood into the interstitial lung spaces as well as into the alveolar spaces.

The electrolytes were normal and there was a negative Coomb's test. An LE preparation was negative, but this does not necessarily rule out lupus erythematosus. Cul-

tures and smears of bone marrow were negative for acid fast and fungi. The bilirubin distribution and liver function studies support the conclusion that the jaundice was the result of hemolysis. The serum electrophoretic pattern was normal. Swelling of the parotid and submandibular glands was noted, but I think this phenomenon was a secondary affair in a very sick woman who was dehydrated.

It is noted that on Nov. 4, which was 4 days prior to death, she was improved somewhat and that the parotid and mandibular swellings had subsided. Her pulse had slowed to 100 and respiration had dropped from 60 to 32 per minute. X-ray film of the chest on Nov. 1 revealed some clearing of the patchy, spotty, flaky infiltrate in the lung fields with concomitant improvement in her dyspnea. This improvement, I believe, was incident to the steroids she was receiving, which is of considerable diagnostic significance, I think.

Then she had a grand mal seizure. Now we are beginning to see evidence of central nervous system involvement, having already noted kidney, bowel, and lung participation, as well as, mucous membrane involvement in this vascular disease process.

It is to be noted that a neurologic consultant found no evidence of massive intracranial hemorrhage, but did find evidence of involvement of multiple areas of the brain.

In summary, we have a young lady who apparently had been in good health until about two to three weeks prior to her terminal illness which was characterized by involvement of multiple organs of the body by a diffuse pathologic process which I am assuming to be a vascular disease. From a differential diagnostic standpoint then, the question of what kind of vascular disease might this patient have had. I think in the final analysis, one is going to need a tissue diagnosis to be absolutely sure.

Some years ago, there was a syndrome that was described by Goodpasture which was characterized by renal insufficiency, renal bleeding, pulmonary hemorrhage, et cetera. However, so far as I know, Goodpasture did not describe hemolytic anemia or thrombocytopenia with his disease, so it

would not seem that this particular case would fit the so-called Goodpasture's Syndrome.

One might consider that this could be disseminated lupus erythematosus, which is, as you know, a generalized vascular disease. But we do not have enough evidence to make such a diagnosis in that the peripheral blood was negative for lupus cells and there was no skin rash. In addition, we do not have any tissues to corroborate this diagnosis. In my experience, I have never seen these lung findings in lupus erythematosus.

One might incriminate polyarteritis nodosa, which is a diffuse vascular disease involving the smaller arteries of the body. This disease is a distinct possibility, but there are several things against it. Even though patients with polyarteritis might have hemolytic anemia, they usually have eosinophilia, which is not to be found in this case.

Then one has to consider thrombocytopenic purpura. Indeed the patient did have thrombocytopenia, but the "hemorrhagic study" was normal and I presume this included bleeding and clotting times and observation of clot retraction. I do not think one can make a diagnosis of thrombocytopenic purpura in the absence of abnormal bleeding and abnormal clot retraction.

Lastly, I wish to consider the entity which I think this case represents. That is, thrombotic thrombocytopenic purpura. I think this patient was having thrombotic and hemorrhagic episodes in numerous organs of her body. The thrombocytopenia, the hemolytic anemia, all go very well with this diagnosis. Even if this case is not one of thrombotic thrombocytopenic purpura, it must be some form of angiitis.

DR. UPSHAW: Are there any comments?

DR. A. P. KRAUS: I can only agree with Dr. Friedman in the diagnosis of thrombotic thrombocytopenic purpura. This patient presents a classical picture of thrombocytopenia, hemolytic anemia, and multiple transient neurologic disturbances so characteristic of this disorder. I would like to take this opportunity to congratulate the hematology laboratory on their description of

the red cells found in the peripheral blood. (Fig. 1) The marked anisocytosis and

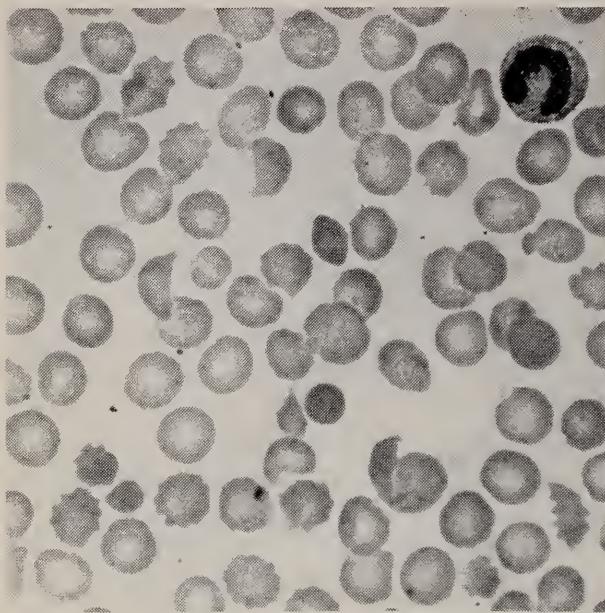


FIG. 1. Peripheral blood showing marked aniso and poikilocytosis with fragmented cells.

poikilocytosis with misshapen cells and cell fragments has been called microangiopathic hemolytic anemia and is seen in patients with artificial heart valves, uremia and metastatic carcinoma in addition to thrombotic thrombocytopenic purpura. When seen in conjunction with thrombocytopenia, TTP should always be suspected.

**DR. UPSHAW:** Dr. Kim will tell us what was found on the autopsy.

**DR. Y. C. KIM:** At the time of the autopsy the body was that of a well developed, well nourished young woman with petechiae on the skin of the upper extremities and around the venipunctures. Small amounts of blood-tinged fluid were found in the serous cavities. There were numerous petechiae in the visceral pleura. The heart showed petechiae in the myocardium, serosa and endocardium. The entire gastrointestinal tract contained a large amount of blood. The gall bladder was completely hemorrhagic. The renal capsule stripped with ease leaving some petechiae on the cortical surfaces. The renal parenchyma also showed a few petechiae. The entire mucosa of the ureters and the urinary bladder was hemorrhagic. The uterus was still enlarged. Hemorrhage was present in the cervix and the myometrium to a greater degree than expected in the average postpar-

tum uterus. The brain weighed 1400 Gm. Externally many hemorrhagic areas were found to involve the posterior lobes, however, cross-sections revealed diffusely distributed hemorrhage. Hematomas were noted in the cerebellar hemispheres. (Fig. 2) The most striking finding on the micro-



FIG. 2. Multiple small hemorrhages of cerebral cortex and hematoma of cerebellum.

scopic examination was the presence of numerous small eosinophilic thrombi in ar-

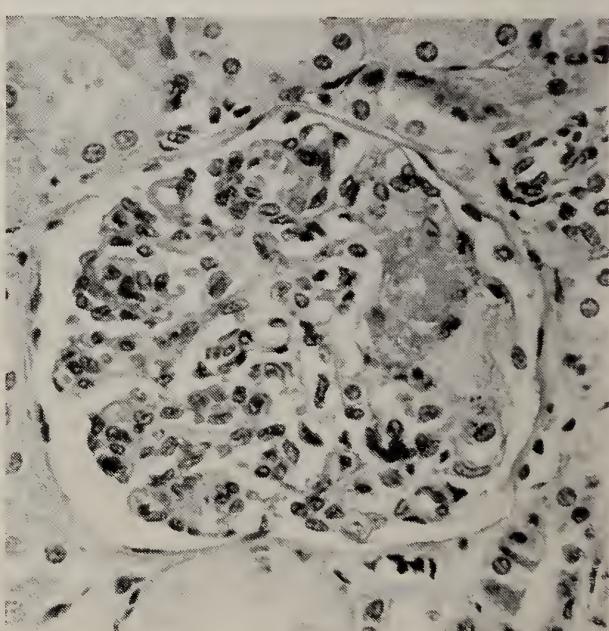


FIG. 3. Eosinophilic hyaline material in glomerular capillary tuft.

terioles and capillaries in many organs. (Figs. 3 & 4) In addition, many of the blood

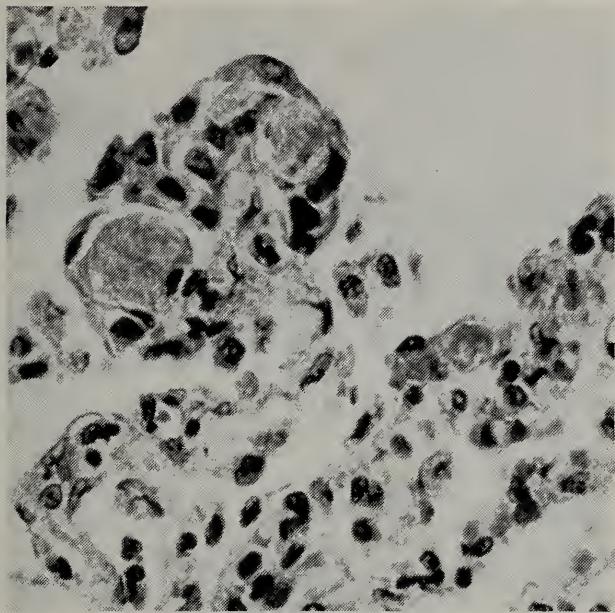


FIG. 4. Eosinophilic hyalin material in pulmonary alveolar capillary.

vessels showed fibrinoid degeneration of their walls. (Fig. 5) However, no inflam-

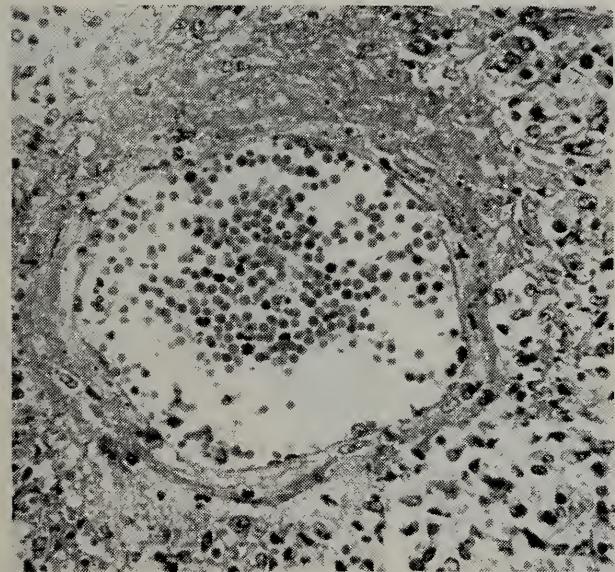


FIG. 5. Fibrinoid necrosis of wall of ovarian vessel.

matory reaction was present.

There have been numerous speculations as to the pathogenesis of thrombotic thrombocytopenic purpura but so far it has eluded solution. Moschowitz<sup>1</sup> described a case in 1925 under the title of "acute febrile

pleiochromic anemia with hyaline thrombosis of terminal arterioles and capillaries" and he suggested it was due to coagulation of red blood cells. In 1936, Baehr and associates<sup>2</sup> explained the thrombocytopenia on the basis of agglutination of platelets. Craig and Gitlin<sup>3</sup>, in 1957, utilizing immunofluorescent technics with labeled antibodies, demonstrated that the plugging materials of thrombotic thrombocytopenic purpura consisted of fibrin and not platelets. This observation suggested a close relationship of this disease with the collagen disease which are frequently associated with fibrinoid degeneration of vessel walls.

In 1964, Taub and his associates<sup>4</sup> attempted to explain thrombotic thrombocytopenic purpura as a Schwartzman reaction. In this reaction, severe alteration in the clotting mechanisms with consumption of plasma clotting factors leads to the intravascular deposition of fibrin. Depressed phagocytic function of the reticuloendothelial system in this reaction makes the phagocytes unable to clear the intra-vascular fibrin that naturally occurs. They also explained the bizarre erythrocytic morphology on the basis of trauma occurring during the passage through the already narrowed capillaries by the fibrin deposit.

What role the pregnancy played in this case is not known, but it seems likely that it was a coincidence.

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# in diarrhea

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From the  
Executive  
Director

# MEEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### Blue Cross-Blue Shield Named by Welfare Department As Intermediary For Old Age Assistance

● The Tennessee Department of Public Welfare has named the Blue Cross-Blue Shield to handle the deductibles, the co-insurance and the premium payments under Part B of Medicare for Old Age Assistance recipients receiving benefits under Medicare. (This is the "buy in" coverage under Part B.) Similar payments will also be made for the deductibles and co-insurance under Part A (hospital coverage). These payments will be made by the State of Tennessee, Department of Public Welfare, with Blue Cross serving as intermediary.

Besides the programs under Medicare, the Welfare Department will continue its drug and nursing home programs for the 40,000 people in the State receiving Old Age Assistance.

Physicians will submit their claims for payment to the fiscal intermediary (Equitable Life Assurance Society of the United States) for OAA recipients, the same as any other person over 65.

● The Reference Guide for Physicians, designed to answer the physician's questions about the provisions and operation of the two-part program on health insurance for the aged, was mailed to all physicians in the United States during June and covered some 280,000 physicians in private practice.

The physician's Medicare reference guide includes examples showing which health services are covered, which are not covered, and what part of the hospital and other medical expenses, the Medicare program will pay after July 1. The reference guide covers several points of special interest to physicians:

- (1) The policies for claims payment by "carrier" organizations.
- (2) The physician's participation in utilization review.
- (3) Certification of medical necessity for hospital stays.
- (4) Recertification of medical necessity after stays of 14 days and at longer intervals of hospitalization.

Claims for physicians' services—under Part B—will be handled by the Equitable Life Assurance Society of the United States.

In addition, the American Medical Association is publishing a pamphlet on Medicare for use by physicians. The AMA announced that the booklet was to be published shortly after all regulations on P.L. 89-97 are published. Check your information material for explanations of billing procedures under Part B of "Medicare". Determine whether you plan to bill the patient and let him collect from the carrier, or whether you will accept an assignment, collect in part from the carrier and bill the patient for the difference. Be sure your "Medicare" patients understand your procedure, and their responsibility for payment.

### Reference Guide For Physicians

## **Medicare Handbook**

● Mailing of the Medicare Handbook began on June 1 and continued throughout the month of June. This publication placed detailed information about Medicare benefits and how Americans who are eligible will be paid after July 1. Each physician also has been mailed an advance copy of the beneficiary's Medicare Handbook, along with the Doctor's Reference Guide.

## **Medicare Report**

● The June 20 issue of the AMA NEWS, received by all physicians, contained a special section devoted to the Medicare Law (P.L. 89-97). This special section will answer questions physicians need to know about the Medicare Law—its provisions, terms, forms, procedures. The special section of the AMA NEWS is designed so that physicians can keep it and use as a ready reference.

## **Consultant Firm Studying Administration of Title XIX Under Medicare**

● The consultant firm of John B. Joynt & Associates, Inc., New York City, has been retained by the State Government of Tennessee to study and advise on what state agency should administer Title XIX of the Medicare Act. This is the Title that brings in the medical and health care programs of the indigent and welfare type of persons. The Tennessee Medical Association has been invited to have representatives to discuss this subject with the consultant firm. Since TMA has taken a strong position recommending the Department of Public Health to be the state agency to administer Title XIX, physicians of the Committee on Governmental Medical Services will, at an early date, discuss preliminary matters and present TMA's position to the consultant firm.

## **H.R. 10—Keogh Law Amendments Passed by House of Representatives**

● On June 6, the House approved a bill liberalizing the Keogh Law providing tax deferments on retirement savings by the self-employed. The bill would allow the self-employed, such as physicians, to deduct from reported income 100% of their retirement savings up to \$2500 per year. The present Law limits the deduction to 50% of \$2500. Organizations representing self-employed persons, including the American Medical Association, have urged that the Keogh Law be broadened to allow a 100% deduction on the \$2500 maximum. In addition, they have called for an unlimited ceiling on how much could be set aside for retirement with tax deferred until retirement.

## **TMA Council Meets With Hospital-Based Specialists**

● The Council of the Tennessee Medical Association met jointly with representatives of the specialties of Radiology, Pathology and Anesthesiology on May 29th. The discussions concerned the payment of hospital-based specialists after July 1. The TMA House of Delegates and the Council had set a date of July 1 as the time when the separation of fees of the Radiologists and Pathologists from hospitals was to become effective.

A special letter has been sent to the membership outlining the position of the Council. The official action of the Council was to the effect that at the end of June 30, 1966, a separate fee on a group or personal billhead should be rendered and the collection of all monies should be separate from hospital bill collections. The Council likewise stated its disapproval of collusive activities of any hospital and physician for the purpose of collecting monies from a third party.

Previous efforts had been made by the Executive Committee of the Board of Trustees of TMA to obtain an agreement from the Tennessee Hospital Service Association (Blue Shield) to reimburse Radiologists and Pathologists and other hospital-based specialists with separate payments from those made to hospitals.

# Public Service

THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

## TV Series Being Aired in Chattanooga, Johnson City

- "Spotlight on Medicine", TMA's current public service television series is now being shown over WRCB-TV in Chattanooga on Sunday evenings at 7:00 and over WJHL, Johnson City at 2:00 on Sunday afternoons.

The 13-week series, which utilizes a panel of local physicians to discuss various surgical operations and diseases following a filmed description, has completed successful runs over stations in Jackson, Nashville and Knoxville.

With the inclusion of Chattanooga and Johnson City, a conservative estimate of the commercial cost of the television time donated as a public service by the stations involved amounts to more than \$11,000.

- Another medical milestone was achieved this Spring when graduations from medical schools pushed the nation's physician population past the 300,000 mark.

In addition to personal achievement, the crossing of the 300,000 barrier symbolized the nation's progress in producing more and more doctors of medicine to meet the increasing demands for medical care in a growing population.

The physician-population ratio, which is the number of physicians divided into the total population, has materially improved just since 1960. At the end of 1960, there were 253,000 MD's in the U.S., or one physician for every 737 people. By the end of 1965, the M.D. population rose to 292,000 or one for every 681 people.

The Council on Medical Education of the AMA forecasts that by 1975 there will be one physician for every 638 people, and by 1985 that ratio will have improved still further to one physician for every 619 people.

There are now 88 medical schools in the U.S. with 10 new schools built since 1947 and a former osteopathic college converted into a fully accredited medical school. By 1970 an additional 13 schools will be in operation. Six more are virtually assured and another 6 are possible by 1975.

There are more applicants to medical schools, more students enrolled and more M.D.'s being graduated than ever before. In the 1964-65 school year, the 88 medical schools had a total enrollment of 32,428 students and graduated a record 7,409 new M.D.'s.

A large measure of the credit for this improving picture must be given to the nation's physicians who have supported extensive career programs through the AMA and the state medical associations.

Each county medical society in Tennessee has received a kit of materials encouraging a public relations program to inform the public of medicine's progress in turning out doctors fast enough to keep up with the growth in population. All too frequently people who are uninformed or misinformed accuse the AMA, state and local medical societies of limiting the supply of physicians.

County medical societies can aid in this nationwide effort by utilizing the materials on hand from the AMA to arrange for speaking engagements on the subject before civic groups and other organizations, encourage local newspapers

## M.D. Population On Increase

## A Look To The Future

to editorialize and to generally promote better understanding of the facts by the general public.

- In the May, 1966 edition of INDICATORS, a publication of the Department of Health, education and Welfare, Under-Secretary of HEW Wilbur J. Cohen authored an article "Social Policy for the Nineteen Seventies."

Mr. Cohen, often referred to as the creator of the current Medicare law, made the following comments:

"By new and ingenious provisions in our private enterprise, social security and tax systems, the private and public sectors will be able to assure a minimum income to all who work, and to all who are too sick or disabled or too old or too young to work." . . .

"The organization and delivery of medical services will also be changed as we go along. Much better use must be made of trained professional manpower by delegating the nonprofessional aspects of their jobs to subprofessional aids." . . .

"And the miracles of modern medicine will be available to all, through private and public insurance arrangements, irrespective of race or color, income, or any other factor unrelated to medical necessity. Insurance will cover practically all major medical costs for virtually the entire population."

## Health Care Spending Increases

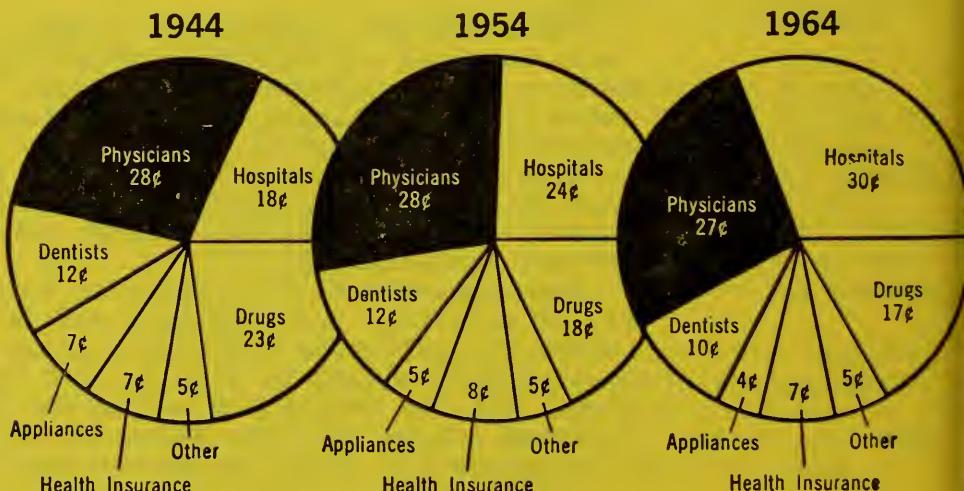
- Americans are increasing spending for health care. The AMA reports, however, that more money is spent for tobacco than for hospital care, and more for cosmetics and haircuts than for doctor bills.

Spending for health care totaled \$25.2 billion in 1964, according to figures of the U. S. Department of Commerce. That's an increase of 7.8 per cent from the \$23.4 billion spent in 1963.

The Department of Commerce reported these expenditures for health care in 1964:

Hospitals, \$7.6 billion, up 12.5 per cent over 1963; physicians, \$6.8 billion, up 5.5 per cent over 1963; drugs, \$4.4 billion, up 5.2 per cent; dentists, \$2.4 billion, up 5.8 per cent; health insurance, \$1.8 billion, up 6.3 per cent; appliances, \$1.1 billion, up 9.7 per cent and other services, \$1.2 billion, up 6.9 per cent over 1963.

The chart below shows the distribution of the health care dollar in 1964 as compared with the years 1944 and 1954.



DISTRIBUTION OF THE HEALTH CARE DOLLAR

SURVEY OF CURRENT BUSINESS, November 1965, Vol. 45, No. 11  
SOURCE: U. S. Department of Commerce, Office of Business Economics,  
pp. 20-23. (Calculations by Department of Economics, AMA)

—AMA News Graphicart

# TENNESSEE VALLEY MEDICAL ASSEMBLY

(Sponsored by the Chattanooga and Hamilton County Medical Society, Inc.)

**TIVOLI THEATER, CHATTANOOGA, TENNESSEE**

**Monday, September 26, and Tuesday, September 27, 1966**

## 14TH ANNUAL ASSEMBLY

- |                  |   |                  |   |
|------------------|---|------------------|---|
| 7:30             | REGISTRATION BEGINS—MONDAY, SEPTEMBER 26, 1966  | 7:30             | REGISTRATION—TUESDAY, SEPTEMBER 27, 1966  |
| 9:00             | JAMES Z. APPEL, M.D., Past President, AMA, Chicago, Ill., "Medicare, Titles XVIII and XIX Today"  | 9:00             | RICHARD H. OVERHOLT, M.D., Dir., Overholt Thoracic Clinic, Boston, Mass., "The Challenge of Pulmonary Cancer Today"   |
| 9:30             | BENTLEY P. COLCOCK, M.D., Surg. Staff, Lahey Clinic, Boston, Mass., "The Complications of Gallstones"   | 9:30             | BURTIS B. BREESE, M.D., Clin. Prof. of Pediatrics, Univ. of Rochester, Rochester, Minn., "The Diagnosis and Treatment of Streptococcal Infection in Children" |
| 10:00-10:30 A.M. | INTERMISSION—REVIEW OF EXHIBITS   | 10:00-10:30 A.M. | —INTERMISSION—REVIEW OF EXHIBITS  |
| 10:30            | ERIC E. WOLLAEGER, M.D., Head of Sect. in Medicine, Mayo Clinic, Rochester, Minn., "The Diagnosis of Diseases Causing Malabsorption"                | 10:30            | CHARLES J. FRANKEL, M.D., Assoc. Prof., Orthopedic Surg., Univ. of Va. Hospital, Charlottesville, Va., "Doctors and the Law"                                  |
| 11:00            | VERNELLE FOX, M.D., Medical Dir., Georgian Clinic, Atlanta, Ga., "The Physician's Role in the Alcoholic's Recovery"                                 | 11:00            | JAMES F. GLENN, M.D., Prof. and Chief, Div. of Urologic Surg., Duke Univ., Durham, N. C., "Vesicoureteral Reflux in Children"                                 |
| 11:30            | JOSEPH A. FREIBERG, M.D., Prof. of Surg., Dir. Orthopaedic Div., Univ. of Cincinnati, Cincinnati, Ohio, "The Painful Foot, Diagnosis and Treatment" | 11:30            | NOBEL O. FOWLER, M.D., Prof. of Medicine, Univ. of Cincinnati, Cincinnati, Ohio, "Problems in the Diagnosis and Treatment of Pulmonary Embolism"              |

NOON

LUNCHEON SYMPOSIA—Sept. 26, 1966 \$4.00  
(Limited to 85 physicians per symposium)  
(Tickets must be obtained prior to assembly)

### UPPER GASTROINTESTINAL BLEEDING

Guest Panelists: ROBERT J. COFFEY, M.D., BENTLEY P. COLCOCK, M.D., JAMES D. HARDY, M.D., W. GORDON WALKER, M.D., and ERIC E. WOLLAEGER, M.D.

- 2:00 JOE M. BLUMBERG, Brig. Gen., MC, USA; Dir. Armed Forces Inst. of Path., Washington, D. C., "The Role of the Pathologist in Aviation Accidents"

- 2:30 THOMAS P. HAYNIE, M.D., Asst. Prof. of Medicine, Univ. of Texas M. D. Anderson Hospital and Tumor Institute, Houston, Texas, "Visualization of Organs and Tumors With Radioactive Isotopes"

- 3:00-3:30 P.M. INTERMISSION—REVIEW OF EXHIBITS

- 3:30 JAMES A. JOHNSON, JR., M.D., Dept. of Psychiatry, Emory Univ. Clinic, Atlanta, Ga., "Group Behavior and Group Therapy"

- 4:00 W. GORDON WALKER, M.D., Assoc. Prof. of Medicine, Johns Hopkins, Baltimore, Maryland, "Diuretic Therapy and Its Complications"

- 4:30 ROBERT J. COFFEY, M.D., Prof. of Surg., Chairman Dept. of Surg., Georgetown Univ. School of Medicine, Washington, D. C., "Experiences in the Diagnosis and Treatment of Hyperparathyroidism"

NOON

LUNCHEON SYMPOSIA—Sept. 27, 1966 \$4.00  
(Limited to 85 physicians per symposium)  
(Tickets must be obtained prior to assembly)

### RECENT DEVELOPMENTS IN CANCER THERAPY

Guest Panelists: THOMAS P. HAYNIE, M.D., CHARLES J. FRANKEL, M.D., JAMES F. GLENN, M.D., ROBERT D. SULLIVAN, M.D., and WILLIAM H. MORETZ, M.D.

- 2:00 JAMES D. HARDY, M.D., Prof. of Surg., Chairman of Dept., Univ. of Miss., Jackson, Miss., "Problems Associated With Gastric Surgery"

- 2:30 HOWARD W. JONES, JR., M.D., Assoc. Prof., Obstetric and Gynecology, Johns Hopkins School of Medicine, Baltimore, Md., "Diagnosis and Treatment of Primary Amenorrhea"

- 3:00-3:30 P.M.—INTERMISSION—REVIEW OF EXHIBITS

- 3:30 ROBERT D. SULLIVAN, M.D., Dir., Dept. of Cancer Research, Lahey Clinic Fdn., Boston, Mass., "Current Status of Cancer Chemotherapy"

- 4:00 WILLIAM H. MORETZ, M.D., Chairman, Dept. of Surg., Medical College of Ga., Augusta, Ga., "Problems in Management of Occlusive Arterial Disease"

Make check payable to Tennessee Valley Medical Assembly. (Tickets will be mailed to you or held at Registration Desk only if check is enclosed.)

# President's Page



DR. HUBBARD

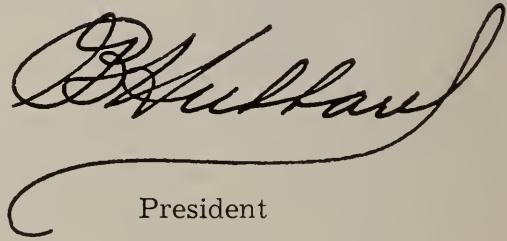
July 1, 1966, will be a day that goes down in medical history. The date that Medicare started will in all likelihood have an impact upon the economics of medicine that will not be forgotten. Under Part B of Medicare—the section of the law that will pay a major portion of the cost of physicians' services for those of the elderly who contribute \$3 per month, the Equitable Life Assurance Society of the United States has been designated as the carrier for Tennessee. The Equitable Life Assurance Company will have certain responsibilities for making the arrangement work in accordance with the terms of the law.

As the "usual and customary charges" provided for in the Medicare Law, Social Security Administration should be willing to accept the usual and customary fees that individual physicians in this state charge their private patients. Whenever questions are about charges for care provided to particular patients, the review committees of the appropriate county medical societies will be consulted and the Equitable Life Assurance Company will act as coordinator. The insurance carrier will take a major part in physician-relation programs concerned with Part B of Medicare. As a first undertaking in the area of physician relations and information on the new program, I am sure that many TMA members reaped worthwhile information from the four regional conferences conducted at Chattanooga, Knoxville, Nashville and Memphis, explaining the functioning of the law. The conferences were sponsored jointly by the Tennessee Medical Association, Tennessee Hospital Association, and the Tennessee Nursing Home Association during the latter part of May.

On July 1, 1966, over 17 million Americans who have reached the age of 65 became immediately eligible for the hospital care benefits embraced by this legislation. Every person over 65 will be eligible for hospital benefits provided under Part A of the law. Part B provides supplementary medical benefits for a monthly insurance payment of \$3.

On January 1, 1967, the extended care facility benefits will begin. This is intended to provide intermediary care after the acute hospital phase ceases. To be eligible an individual must have been provided 3 days of hospitalization, and the benefits extend for 20 days. For another period of 80 days residence in extended care facility is available with the patient paying \$5 per day.

We are experiencing the crush in hospitals on and after July 1st and it is hoped that as we learn to live with these rulings and when the extended care facility benefits become available on January 1, 1967, the public will be able to continue to benefit by the high medical standards previously provided.



President

# THE JOURNAL

OF THE  
TENNESSEE MEDICAL ASSOCIATION

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(Specialty Society Representatives to be named)

JULY, 1966

# EDITORIAL

## TREATMENT OF HYPERTHYROIDISM

Hyperthyroidism is a syndrome of metabolic and pathologic disturbances resulting from the action of the excessive circulating thyroid hormone on peripheral tissues.

Its cause is unknown although a familial and constitutional predisposition has been recognized. A recent study by Vanderlaan<sup>1</sup> failed to demonstrate any psychologic factor more common in patients with hyperthyroidism. Recent evidence suggests that the thyroid gland is driven to produce excess thyroid hormone by a circulating stimulator which is not thyrotropin. This stimulator has been found in the serum of many hyperthyroid patients but not in the serum of those with autonomous thyroid adenoma, Plummer's disease.

In the absence of a known cause at which treatment can be rationally aimed, present modes of therapy are directed at control of the excessive production and secretion of thyroid hormone by either partial ablation

of the thyroid with radioiodine or thyroidectomy or by reducing synthesis with anti-thyroid drugs.

Jerome Hershman<sup>2</sup> has recently summarized his conclusions regarding the most effective methods of treating hyperthyroidism. Each type of therapy has certain disadvantages which must be considered before the clinician seeks the surgeon, the radioisotope therapist or the corner drug store.

Although thyroidectomy has been used for many years, it was not until the pre-operative use of iodine tumbled mortality rates that our present rates of 0 to 0.6% could be achieved. Were it not for the complications of surgery, thyroidectomy would be an efficacious treatment for hyperthyroidism. Following operation hypothyroidism occurs in 4 to 30% while, on the other hand, 8% remain thyrotoxic or have a recurrence necessitating further treatment. In addition, hypoparathyroidism, tetany, permanent vocal cord paralysis and scarring due to poor surgery, serous effusions, hematoma and occasional tracheostomy must be included as significant complications of the surgical approach.

In 1943, Astwood described the effectiveness of anti-thyroid drugs. The thionamide derivatives interfere with the synthesis of thyroid hormone by blocking the organic binding of iodine and the subsequent steps in the synthesis of thyroxine probably through inhibition of a peroxidase enzyme system. The most widely used drugs in this group include propylthiouracil and methimazole with short durations of action necessitating division of the daily dose to an 8-hour schedule. With rare exceptions improvement occurs in 2 or 3 weeks and patients are usually asymptomatic in 6 to 8 weeks. They may be seen at intervals of 2 to 3 months for adjustment of dosage and treatment is ordinarily continued for one year.

Astwood has demonstrated the efficacy and safety of these drugs in the treatment of hyperthyroidism in pregnancy.

Although skin rash is common with anti-thyroid drugs, it disappears with cessation of the drugs. Agranulocytosis may occur in 1 out of 250 to 500 patients and when it



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A large number of investigators have reported major improvement in about 75% of cases. Some patients have gone into remission. Relief of stiffness and pain may be followed quickly by improved function and resolution of other signs of inflammation. And Butazolidin alka is well tolerated, especially since it contains antacids and an antispasmodic to minimize gastric upset.

### Contraindications

Edema, danger of cardiac decompensation; history or symptoms of peptic ulcer; renal, hepatic or cardiac damage; history of drug allergy; history of blood dyscrasia. The drug should not be given when the patient is senile, or when other potent drugs are given concurrently. Large doses are contraindicated in patients with glaucoma.

### Precautions

Obtain a detailed history and a complete physical and laboratory examination, includ-

ing a blood count. The patient should be closely supervised and should be warned to report immediately fever, sore throat, or mouth lesions (symptoms of blood dyscrasia); sudden weight gain (water retention); skin reactions; black or tarry stools. Make regular blood counts. Use greater care in the elderly.

### Warning

If coumarin-type anticoagulants are given simultaneously, watch for excessive increase in prothrombin time. Pyrazole compounds may potentiate the pharmacologic action of sulfonylurea, sulfonamide-type agents and insulin. Carefully observe patients receiving such therapy.

### Adverse Reactions

The most common are nausea, edema and drug rash. Hemodilution may cause moderate fall in red cell count. The drug may reactivate a latent peptic ulcer. Infrequently, agranulocytosis, generalized allergic reaction, stomatitis, salivary gland enlargement, vertigo and languor may occur. Leukemia and leukemoid reactions have been reported but cannot definitely be attributed to the drug. Thrombocytopenic purpura and aplastic anemia may occur. Confusional states, agitation, headache, blurred vision, optic neuritis and transient hearing loss

have been reported, as have hepatitis, jaundice, and several cases of anuria and hematuria. With long-term use, reversible thyroid hyperplasia may occur infrequently.

### Dosage

The initial daily dosage in adults is 300-600 mg. daily in divided doses. In most instances, 400 mg. daily is sufficient. When improvement occurs, dosage should be decreased to the minimum effective level: this should not exceed 400 mg. daily, and is often achieved with only 100-200 mg. daily.

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occurs, comes on rapidly and with characteristic symptoms. Patients with hyperthyroidism often have leucopenia. Routine counting of blood cells may lead to needless alarm and interruption of therapy and is rarely of value in heralding agranulocytosis.

The incidence of recurrence is high following the use of such drugs. A minimal follow-up of 4 years after treatment reveals that the incidence of remission varies from 45 to 72 percent. Reduction in the size of the goiter at the end of treatment and duration of symptoms of less than one year are strong indications of probable long term remissions. The major advantages of treatment with antithyroid drugs are that no damage is done to the thyroid gland, no irreversible changes are induced, lasting myxedema does not occur and hyperthyroidism can be corrected in a reasonably short time. The disadvantages are the high recurrence rate when treatment is stopped and the long period of treatment.

Radioiodine has been used as a means of selectively placing radiation within thyroid tissue for the treatment of hyperthyroidism. It does not produce mortality, tetany or vocal cord paralysis. Failures of treatment are rare and recurrences are virtually unknown. The major drawback of such treatment is the induction of hypothyroidism in a large percentage of cases. In the early months after such treatment low thyroid function may be transient but myxedema appearing one year after therapy is permanent. The incidence of hypothyroidism increases so that 10 years after therapy it is 45 to 50% and continues to increase at the rate of 2% per year.<sup>3</sup> It is difficult to be certain that patients will take oral medication regularly for life and, therefore, the long term hazards of myxedema confront many patients whose hyperthyroidism is treated with radioiodine.

Hershman suggests that antithyroid drugs are preferable for treating hyperthyroidism in young people, pregnancy and patients with a recent onset of hyperthyroidism. Radioiodine is indicated for therapy of hyperthyroidism in patients with a complicating medical illness for whom recurrence of hyperthyroidism is hazardous,

for the elderly, for patients with recurrent hyperthyroidism after surgery and for those who have relapsed after two successive courses of antithyroid drugs. The high incidence of post-treatment hypothyroidism and myxedema makes this form of therapy less desirable, particularly in the young. Because of the complications of thyroideectomy medical modes of treatment are usually preferred.

The ideal treatment of hyperthyroidism has not been developed. All forms of therapy currently in use have undesirable features. However, Hershman has summarized satisfactorily the present status of treatment of this puzzling disorder.

A.B.S.

#### References

1. Vanderlaan, W. P.: Cause of Hyperthyroidism, in Clinical Endocrinology. 1. Edited by Astwood, E. B. Grune and Stratton, New York, 1960, 193.
2. Hershman, J. E.: The Treatment of Hyperthyroidism, Ann. Int. Med. 64: 1306, 1966.
3. Dunn, J. T. and Chapman, E. M.: Rising Incidence of Hypothyroidism after Radioactive Iodine Therapy in Thyrotoxicosis, New England J. Med. 271: 1037, 1964.

#### MEDICARE AND MEDICAL EDUCATION

There are many dire predictions of what will happen in the new era of medical care which will be underway by the time this is published. On the other hand, there is much whistling in the dark at HEW. The old adage, "Time will tell" is never in question. There are bound to be snafus in anything so big and as complex as Medicare and implemented in short order. Red tape will become snarled; recipients in their ignorance of the "small print" will be unhappy; in some heavily populated areas especially, hospital administrators will "tear their hair;" and Congress and HEW will need to sweat out the certainty of underestimation and underbudgeting. Doctors will swear as they need to "do this" and "do that" to aid their old patients.

January first, next, will bring some serious headaches in the shortage of extended care facilities, unless the bars are let down. The home care program demands personnel which on the face of it just does not exist.

**brings  
peace to the  
hyperactive  
colon**



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1. Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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All of the above has been pointed up repeatedly here and there, and has been knocked down by the HEW cohorts as straw-men. Well, "Time will tell!"

The impact of Medicare on medical education, particularly upon graduate education, has not been aired extensively but has many educators worried. The implementation of Title XVIII may not bring this to prominence. But there is a built-in time-fuse postponing the explosion of Title XIX. By 1975 it is said 40% of the population will be covered by Medicare (Titles XVIII and XIX) to which one may add a large segment of children and youths, since it seems highly improbable that suggested legislation for their medical care will not be passed in the next 9 years.

Third party contracts have already sharply circumscribed the "clinical material," in the old sense, over the past 20 years. With every person under Medicare a potential private patient, the problem of an insufficiency of teaching cases become enhanced. Not so much under Title XVIII, because a goodly segment of oldsters have always financed their medical care. But when the welfare recipients become private patients under Title XIX the squeeze will be on! (Add to this, probably, the children and youths of the country.)

Undergraduate education is not a worry. A majority of private patients enjoy the visits with undergraduates or accept them with good natured tolerance, unless they are desperately ill or have unpleasant personalities. The younger generation of women is more tolerant of the student in the delivery room and gynecology clinic than its mothers.

The greater problem is at the graduate level of education. Again, in the "medical specialties" this can be managed quite well as is widely done now, both in the university hospital and in the community hospital having a residency program. The teachers who are really worried, if they will "let their hair down" are the surgeons, whatever the specialty. With all the talk of learning as the assistant, the honest surgeon admits there is only one way to really learn and that is *by doing*. Here is where the bind will come.

In the next few years the staff in the

teaching hospital will need to organize itself in such a way that any patient entering its practice will recognize that automatically he becomes a *teaching case* for either the undergraduate or the graduate. Of necessity such planning is already underway in a number of institutions in this country. (At a committee meeting some weeks ago a Canadian colleague described to us the workings of such an established organization north of the border.)

The legal implications, especially in the surgical field are ghastly. A sensible "out" will be required licensure of the resident, the teaching hospital covering him with liability insurance. The liability might become so inordinate that the government might need to write this insurance, since the welfare recipient, and all this implies, in the majority of instances, is the ideal person to enter litigation with the hopes of a "ride on the gravy train"!

In the White Paper of the National Health Service of Great Britain broadcast on NBC Television in 1963 an orthopedist described the good care provided by the Service as equal to that of the private patient and that he gets the care "that he needs, not what he wants." Another item slipped into the telecast, that "The National Health Service patient signs a release at the time of admission to the hospital for operation, stating that he is willing to accept the services of any surgeon assigned by the Chief of the Service." A teaching service can take this leaf from the British book, provided the resident has the legal status of state licensure followed by ample coverage of liability insurance. Though Medicare assures the patient of free choice of physician there is nothing that forbids him to abrogate this free choice by signing a release. Who gets the fee, resident, hospital or the service will need to be worked out.

The private practitioner may complain of any scheme which is set up on a teaching service, but I would think this the lesser evil of all the facets of socialized medicine. Teaching must go on, doctors are needed, sons will need to be educated, adequately trained associates will be needed in practice. The problem of the loss of the indigent teaching case and the problems of

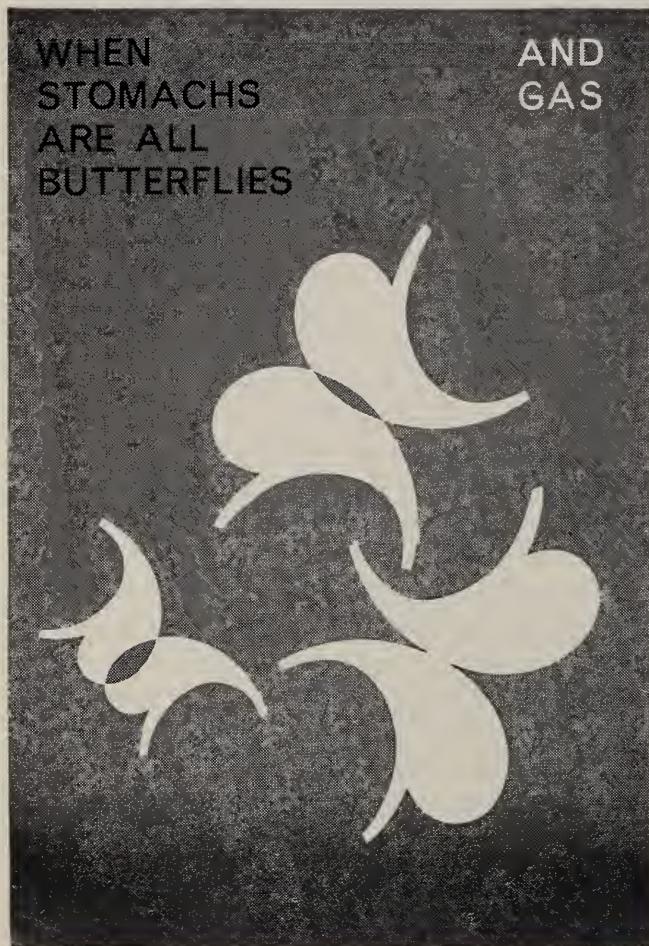
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**Administration and Dosage:** One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

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the medical educator are merely part and parcel of the *great society*—no one is immune.

R. H. K.

## DEATHS

**Dr. James Otis Gordon**, 69, Memphis, former president of the staff of St. Joseph Hospital, died May 6th at his home.

**Dr. Hamilton V. Gayden**, 55, Nashville, died May 17th at his home following a lengthy illness.

**Dr. William Ross Arrants**, 74, Athens, died April 29th in a local hospital.

**Dr. E. O. Prather, Jr.**, 60, Alamo, died May 18th at Haywood County Memorial Hospital in Brownsville.

**Dr. Edmund B. Allen, Sr.**, 79, Murfreesboro, died May 24th in Rutherford Hospital.

**Dr. Sam C. Cowan, Jr.**, 55, Nashville, died of a heart attack at his home on May 15th.

**Dr. Robert Leo McReynolds**, 84, Knoxville, died May 27th at Kingston Pike Nursing Home.

**Dr. Robert J. Phlegar**, 76, died at his home in Washburn on May 13th.

**Dr. Paul L. Warner**, 66, Nashville, died May 10th at his home.

**Dr. James Frederick Thackston**, 62, Bristol, died April 30th at his home following a heart attack.

**Dr. Dwight Noble Arnold**, 64, Cleveland, died April 30th in a local hospital.

**Dr. R. A. McCall**, 65, Sevierville, died May 13th in a Knoxville Hospital.

**Dr. William Tilson Woodward**, 83, Erwin, died May 29th in Unicoi County Memorial Hospital after an illness of two weeks.

physicians, hospital administrators, nurses and community officials, using as his topic, "A Community-Wide Program on Stroke Rehabilitation—The Team Approach". The lectures, established in 1961, are sponsored by the Appalachian Heart Association and the Sullivan-Johnson County Medical Society in cooperation with the Home Federal Savings & Loan Association.

## Roane-Anderson County Medical Society

All ministers of Roane and Anderson Counties were invited to attend the dinner meeting of the Society on May 31st. The speaker was The Reverend James E. Spicer of United Church. His subject was "The Treatment of Crocks", a discussion of emotional illnesses which complicate everyday medical problems.

## Memphis-Shelby County Medical Society

The Memphis-Shelby County Medical Society met in regular session in the auditorium of the Institute of Pathology on June 7th. The program, entitled "Medicare and the Practicing Physician" was presented by Dr. James J. Feffer of Washington, D.C., President-elect of the American Society of Internal Medicine and Consultant to the Division of Medical Care Administration, Public Health Service, Department of Health, Education and Welfare.

## Consolidated Medical Assembly of West Tennessee

Ken Roberts, Republican candidate for the U. S. Senate, was the principal speaker at a joint meeting of the Consolidated Medical Assembly of West Tennessee and the West Tennessee Consolidated Medical Auxiliary, held at the New Southern Hotel on May 3rd. His topic was "So You Never Had It So Good?"

## NATIONAL NEWS

### The Month in Washington

(From the Washington Office, AMA)

Administration officials say that the doctor-patient relationship should not be impaired under medicare. Dr. Philip R. Lee,

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

### Sullivan-Johnson County Medical Society

Dr. John W. Goldschmidt, Philadelphia, who has gained national recognition in coordinating a community-wide program on stroke rehabilitation, presented the Nat T. Winston Lecture at the dinner meeting of the Sullivan-Johnson County Medical Society in Kingsport on May 12th. The Philadelphia specialist, director of the Department of Physical Medicine and Rehabilitation at Jefferson Medical College Hospital, presented the latest techniques and refinements in stroke rehabilitation to area

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assistant secretary of health, education and welfare for health and scientific affairs, said in an interview that federal officials, in drafting medicare regulations, had been doing their utmost to insure that the traditional doctor-patient relationship is preserved.

"The guidelines for the medicare program were developed with the close cooperation of so many physicians and other people in the health care field that this will provide the best assurance for the physicians, for the government, for Congress and for the public that the implementation of medicare will not alter the fundamental and vital personal relationship between the doctor and the patient. This was clearly the intent of Congress," Lee said.

Lee termed the cooperation of physicians and hospital officials in developing medicare guidelines as "extraordinary". He said he personally expects the doctor-patient relationship to improve under medicare because removal to a large extent of the financing problem will give a physician more leeway in ordering laboratory tests and sending a patient to a hospital.

"Our most important concern in implementing the medicare program is education. The education extends to the doctor, the patient and administrators of the program". Lee's office published a brochure for patients and another for doctors explaining what the medical insurance program does and doesn't do.

The Social Security Administration said that nine out of ten of those 65 and over had enrolled in Plan B of medicare by the second signup deadline of midnight, May 31. The original deadline was extended for two months in an effort to get a reply from as many as possible of the 19.1 million aged persons eligible. More than 400,000 signed up during the two months, bringing the total to about 17.2 million. About one million said they did not want Plan B coverage. Those who did not sign up this time will not have another opportunity until Oct. 1, 1967, and they then will have to pay at least ten percent higher premiums.

President Johnson invited about 200 physicians and hospital administrators to a White House meeting on June 15 "to examine problems that may arise and to discuss

cooperative arrangements so that the (medicare) program will get off to a good start."

In addition to Johnson, speakers at the meeting included HEW Secretary John W. Gardner; HEW Undersecretary Wilbur J. Cohen; Lee; Surgeon General William H. Stewart; Social Security Commissioner Robert M. Ball, and Arthur E. Hess, director of medicare.

Social Security headquarters at Baltimore set up an around-the-clock medicare information service to help its district offices in responding to queries from, beneficiaries, physicians, hospital administrators and others.

\*\*\*

The Defense Department has slashed by almost one-third—from 2,496 to 1,713—its special draft call for physicians to be delivered to the armed forces this summer.

Under the revised doctor draft call, the Army will take 958, the Navy 405 and the Air Force 350. The Pentagon said casualties in Southeast Asia had been fewer than expected and the number of volunteer physicians had exceeded estimates. In reducing the call by 783, the Defense Department pointed out it had originally issued its request to Selective Service last February. At that time it used best estimates available on the number of additional physicians who would be needed for the buildup of the armed forces in connection with the Viet Nam war.

HEW Secretary John W. Gardner plans to reorganize the Public Health Service to give the Surgeon General more control over eight new divisions which would replace the present eight. One of the new eight major divisions would be a National Institute of Mental Health which is now lumped under the National Institutes of Health. The new national institute will include the Fort Worth and Lexington Narcotics Hospitals and will "administer a unified program of research, manpower training, demonstrations and mental health services." Gardner said the institute will "serve as the principal focus for research and control programs in alcoholism and drug addiction."

The other seven new divisions would be National Institutes of Health, the Bureau of Health Services, the Bureau of Health

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**COMPOSITION:** Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

**ADMINISTRATION AND DOSAGE:** Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

**SIDE EFFECTS:** Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoxoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

**PRECAUTIONS:** If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

**CONTRAINDICATIONS:** Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

**CARCINOGENICITY POTENTIAL:** Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

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Manpower, the Bureau of Disease and Injury Prevention and Control, the National Library of Medicine, the National Center for Health Statistics and Surgeon General's office.

Gardner also told a House Commerce Subcommittee that studies are underway to reorganize HEW into a Pentagon-type organization with a super-type secretary over three separate secretaries of Health, Education and Welfare. But he said, "now is not the time to act on those proposals."

Gardner's Public Health Service reorganization plan transfers to the secretary all functions of the Public Health Service, the Surgeon General and all other agencies in the service. Gardner called the present structure of the Public Health Service "obsolete". He pointed out it was unchanged since 1943 when the service had a budget of \$52 million compared to the present budget of \$2.4 billion.

## MEDICAL NEWS IN TENNESSEE

### Tennessee Heart Association

Physicians and lay members from throughout the state attended scientific and general membership sessions of the Tennessee Heart Association's 13th Annual Meeting in Gatlinburg, May 19-21. The faculty for the scientific sessions included: Dr. J. E. Acker, Knoxville; Dr. John Foster, Nashville; Dr. Bernard Lipman, Atlanta; Dr. David Meek, Memphis; Dr. James Pate, Memphis; and Dr. Borys Surawicz, Lexington, Kentucky. Dr. Laurence A. Grossman, Nashville, was installed as President at the closing session of the three-day meeting. Dr. Grossman appointed a long-range planning committee, chaired by Dr. David McCallie of Chattanooga, to evaluate activities and make plans for the continuation and expansion of the Association's work. Dr. Robert F. Thomas of Pitman Center was guest speaker at the President's Dinner, held at the Greystone Hotel on May 20th.

### National Symposium on Deafness

A national symposium on deafness in children, cosponsored by the Bill Wilkerson

Hearing and Speech Center and the Vanderbilt University School of Medicine was held May 5-6 at the school's Underwood Auditorium. Guest lecturer was Sir Terence Cawthorne, London, consulting adviser in otolaryngology to the British Ministry of Health. The Center and the lecture series honor the late Dr. William Wesley Wilkerson, Jr., who originated a statewide speech and hearing program. Approximately 450 attended the symposium supported by a grant from the U. S. Children's Bureau of the Department of Health, Education and Welfare and the Tennessee Hearing and Speech Foundation.

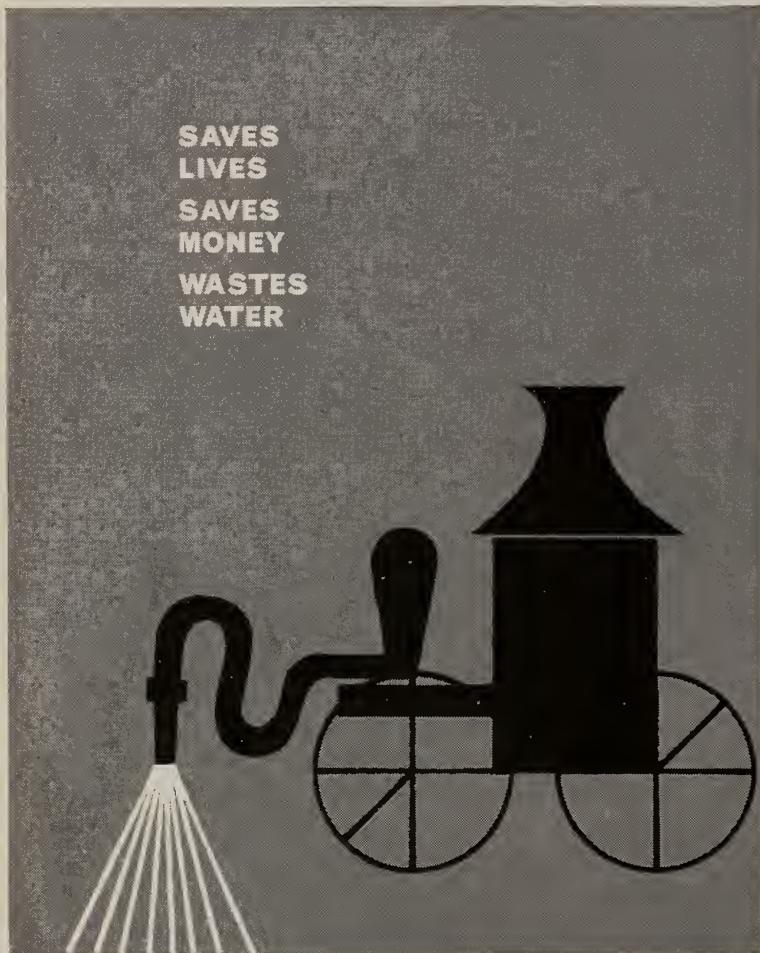
### \$48,000 for New ORAU Study

Oak Ridge Associated Universities medical division will undertake a study of infections in irradiated patients for the U. S. Army Medical Research and Development Command. The AMRDC has granted \$48,000 for the first year of the study program which began July 1st. The work will be carried out by the medical division under an interagency agreement with the Oak Ridge Operations Office of the U. S. Atomic Energy Commission. The medical division will endeavor to determine in patients with bone marrow depression from irradiation and other causes, the types of infections that occur, factors in susceptibility, and improved methods of treatment.

### Advisory Board to Guide Memphis' Medical Center

Organization of a planning group to serve in an advisory capacity on health care and development of Memphis' ever-expanding medical center is in progress. The group, tentatively to be known as the Memphis and Mid-South Medical Center Board, will have twenty-six members initially representing a cross-section of the medical community. A study committee of the Memphis and Shelby County Medical Society recommended that the board also be composed of members-at-large to represent all aspects of community life. The Board will strive to: 1) Work toward improving quality of patient care in Memphis as economically as possible. 2) Encourage new construction and improvement of existing facilities and

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**Precautions:** As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

**Side Effects:** Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have occasionally been noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by the administration of thiazides.

**Contraindications:** Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

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services. 3) Assure more effective use of funds by avoiding duplication of facilities. 4) Stimulate educational programs of a medical and paramedical nature. 5) Represent the public interest in all matters pertaining to medical center developments and operations. 6) Develop more effective inter-relationships among institutions and facilities. 7) Assist in developing an orderly distribution of facilities in keeping with projected population characteristics and over-all community development.

### Grants to Tennessee Medical Schools

Vanderbilt University School of Medicine and Meharry Medical College have gained preliminary approval for a joint federal grant "in excess of \$500,000". The grant received the approval of the Regional Advisory Group and is being considered by the National Institute of Health. The money will be used for planning a program in the field of heart disease, cancer, stroke and the related diseases in the eastern two thirds of Tennessee, a part of southern Kentucky and part of northern Alabama.

Three federal grants totaling \$50,696 have been awarded for development of the division of ophthalmology at Meharry Medical College. The grants were made by the National Institute of Neurological Diseases and Blindness under the Department of Health, Education and Welfare. The money will be used to start a training program in the science which deals with the structure, functions and diseases of the eye.

The Department of HEW also awarded a grant of \$72,575 to Meharry to be administered by the committee on institutional research. It will be used to provide student research fellowships during the summer months, to provide interim research grants for new and returning faculty members, to support faculty research associates and to purchase research equipment for use jointly by departments and faculty members.

A total of \$81,000 in federal scholarship grants has been allocated to the University of Tennessee Medical Units in medicine, dentistry and pharmacy. The Department of Health, Education and Welfare has allocated funds for the academic year 1966-67 on the following basis: College of Medicine, \$40,000; College of Dentistry, \$21,000; and

College of Pharmacy, \$20,000. The funds are for use of incoming, or first-year students who need financial assistance in obtaining an education. Applications or inquiries for further information should be directed to the Office of the Dean of the particular college involved at the Medical Units in Memphis.

### PERSONAL NEWS

**Dr. George V. Mann**, associate professor of biochemistry at Vanderbilt University School of Medicine, was installed as president of the Middle Tennessee Heart Association. **Dr. Crawford Adams**, Nashville, was named president-elect to take office in 1967. **Dr. Lloyd Ramsey**, Nashville, was selected as Chairman of the Board.

**Dr. George K. Carpenter, Sr.**, Nashville, was the recipient of the MTMA's first distinguished service award at the 143rd Semiannual Meeting in Shelbyville, May 19. Dr. Carpenter was cited for meritorious service to medicine and the community.

**Dr. Charles G. Stockard, Jr.** has become associated with **Dr. J. E. Young** in the practice of medicine in Sweetwater.

**Dr. William G. Hayes**, Cleveland, has been elected to Fellowship in the American Academy of Pediatrics.

**Dr. David P. Hall**, Chattanooga, discussed advances in surgery during the past forty years in treating patients with cardiovascular disease at a recent meeting of the Rotary Club.

**Dr. James L. Craig**, Chattanooga, has been named chief health officer in TVA's division of health and safety.

**Dr. Stanley M. Elmore**, instructor in Vanderbilt University's School of Medicine, became associate professor and chairman of orthopedic surgery at the Medical College of Virginia in Richmond on July 1st.

**Dr. John O. Williams, Jr.**, Mt. Pleasant, has been elected an active member in the American Academy of General Practice.

**Dr. John H. Burkhart**, Knoxville, was guest speaker at the Senior Citizens Center on May 4th. Dr. Burkhart discussed medicine with relationships between doctors, hospitals and patients.

**Dr. Eben Alexander, Jr.**, formerly of Knoxville, and professor and director of the section on neurosurgery at the Bowman Gray School of Medicine, Winston-Salem, has been selected president of the Harvey Cushing Society.

**Dr. James A. Kirtley, Jr.**, Nashville, clinical professor of the Department of Surgery, Vanderbilt University, was guest speaker at a recent meeting of the Memphis Surgical Society. His subject was "Surgery of the Common Duct".

**Dr. Ira S. Pierce**, Knoxville, assumed the presi-

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Reserpine 0.1 mg.

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dency of the East Tennessee Heart Association on April 27th, succeeding **Dr. William K. Rogers**.

**Dr. George G. Young**, Chattanooga, has been named chairman of the health and sanitation committee of the Greater Chattanooga Chamber of Commerce.

**Dr. Greer Ricketson**, president-elect of the Nashville Academy of Medicine, was guest speaker at a banquet on May 23rd honoring 19 doctors for their outstanding services and dedication at Madison Hospital. Those honored and their years of service were: **Drs. Eric Bell, Jr., W. J. Card, William H. Edwards, Hillis F. Evans, James T. Ladd, Charles M. Gillit, Henry B. Brackin, Jr., and Robert L. Pettus, Jr.**, 5 years of service; **Drs. Wendell W. Wilson and Christopher C. McClure, Jr.**, fifteen years; **Drs. Henry B. Brackin, Sr. and Frederec B. Cothren**, twenty years; **Dr. Max K. Moulder**, 25 years; **Drs. Cyrus E. Kendall, J. E. Sutherland, Thomas W. Dailey, and Alvin Hawkins**, over thirty years of service. Drs. Dailey, Southerland, Hawkins and Kendall received additional recognition in the form of matching plaques bearing the Hippocrates Oath.

**Dr. Philip M. Lewis**, Memphis, has been named president of the American Ophthalmological Society.

**Dr. Nicholas Gotten**, who has been associated with neurology for thirty years at the University of Tennessee College of Medicine was honored with a formal dinner by forty of his colleagues and their wives on May 27th. Dr. R. A. Utterback, who succeeded Dr. Gotten as chairman of the division of neurology in 1959, unveiled a portrait of the neurosurgeon which will be placed in the division's conference room. A plaque was presented to Dr. Gotten in appreciation of his service.

**Dr. Carroll Long**, Johnson City, has been commissioned as the first medical missionary of the Holston Methodist Conference. Dr. and Mrs. Long will leave in August for Nome, Alaska, where they will be in charge of the Maynard-McDougall Methodist Hospital.

## BOOK REVIEW

**Hernia**. Edited by Lloyd M. Nyhus, M.D., and Henry N. Harkins, M.D., both of the Department of Surgery, University of Washington School of Medicine, Seattle. 822 pages. Philadelphia: J. B. Lippincott Company, 1964. Price \$28.50.

This book is a very thorough treatise on the many types and variants of abdominal and juxta-abdominal hernias. There are 59 chapters written by 105 contributors, each of whom is an authority on some aspect of hernia. One interesting feature is the incorporation of "special comments" by invited experts at the end of many chapters. These comments are sometimes critical in nature, often presenting different or alternate opinions

and in many instances summarize the commentator's experience on the specific subject under discussion. In addition the editors frequently add comments based on their own knowledge and experience.

Nineteen chapters are devoted to hernias in the groin. The anatomy of the inguinal and femoral regions is presented by several authors with each giving his own concepts and interpretations. The apparent differences and disagreements are eliminated and reconciled to a great extent by the editorial comments. The history of repair of groin hernias is reviewed in detail. The various techniques of herniorrhaphy and the results of surgical repair are documented.

Seven chapters are devoted to abdominal hernias other than those of the groin. There are detailed descriptions of the rarer forms of abdominal hernias. Included are the various types of internal hernias and pelvic hernias. Ten chapters are given to the pathology, anatomy, diagnosis, and therapy of the various types of diaphragmatic hernia. Again there is a wealth of information furnished by the many authorities writing these sections.

One large section (8 chapters) of the book is devoted to discussion of specific and general adjunctive techniques and maneuvers to the repair and management of hernias. Also the problems of "industrial" hernia and the medicolegal aspects of hernia are discussed.

In summary, this book is a very current, complete, and authoritative compendium of the entire subject of hernia. It is a must as a reference work for the library of the herniologist or any surgeon possessing a special interest in the management of hernias.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966

#### State

Sept. 26-27	Tennessee Valley Medical Assembly, Tivoli Theater, Chattanooga
Oct. 12-13	Second Annual Tennessee Mental Illness & Health Congress, Hotel Hermitage, Nashville
Nov. 9-11	Tennessee Academy of General Practice, 18th Annual Scientific Assembly and Congress of Delegates, Gatlinburg Auditorium, Gatlinburg

#### National

Sept. 8-10	American Association of Obstetricians and Gynecologists, The Homestead, Hot Springs, Va.
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Sept. 16-24	American Society of Clinical Pathologists, Washington Hilton Hotel, Washington, D. C.
Sept. 17-23	College of American Pathologists, Washington Hilton Hotel, Washington, D. C.
Sept. 29-Oct. 2	American Medical Writers' Association, Annual Meeting, Waldorf Astoria, New York City
Oct. 1-5	American Society of Anesthesiologists, Sheraton Hotel, Philadelphia
Oct. 1-7	Annual Otolaryngologic Assembly of 1966, New Illinois Eye and Ear Infirmary at the Medical Center, Chicago
Oct. 2-7	American Society of Plastic and Reconstructive Surgeons, Inc., Flamingo Hotel, Las Vegas, Nev.
Oct. 10-14	American College of Surgeons, Fairmont Hotel, San Francisco
Oct. 10-13	American Academy of General Practice, War Memorial Auditorium, Boston
Oct. 13-15	Association of American Physicians and Surgeons, Disneyland Hotel, Disneyland, Calif.
Oct. 15-16	American Association of Ophthalmology, Palmer House, Chicago
Oct. 16-21	American Academy of Ophthalmology & Otolaryngology, Palmer House, Chicago
Oct. 17-20	American Academy of Neurological Surgery, San Francisco
Oct. 17-22	Congress of Neurological Surgeons, Americana Hotel, San Juan, P.R.
Oct. 21-25	Association of American Medical Colleges, San Francisco Hilton Hotel, San Francisco
Oct. 22-27	American Academy of Pediatrics, Palmer House, Chicago
Oct. 23-26	American College of Gastroenterology, Bellevue-Stratford Hotel, Philadelphia
Nov. 2-3	American College of Preventive Medicine, San Francisco Hilton, San Francisco
Nov. 14-18	Southern Medical Association, Washington, D. C.
Nov. 26-27	American College of Chest Physicians, Flamingo Hotel, Las Vegas, Nev.
Nov. 27-30	American Medical Association, Las Vegas, Nevada

29. The moderators for the course will be Dr. I. Snapper, consultant, Ft. Hamilton Veterans Administration Hospital, Brooklyn, and Dr. John L. Madden, Clinical Professor of Surgery, New York Medical College and Director of Surgery, St. Clare's Hospital, New York.

The faculty for the course will be drawn from the medical schools in and around Philadelphia. The subject matter to be covered, from the medical as well as the surgical viewpoint, will be essentially, the diagnosis and treatment of gastrointestinal diseases and comprehensive discussions of diseases of the esophagus, stomach, pancreas, liver and gallbladder, small intestine and colon. A session on instrument technics will be held at the Albert Einstein Medical Center, Norther Division.

For further information and enrollment, write to the American College of Gastroenterology, 33 West 60th Street, New York, New York 10023.

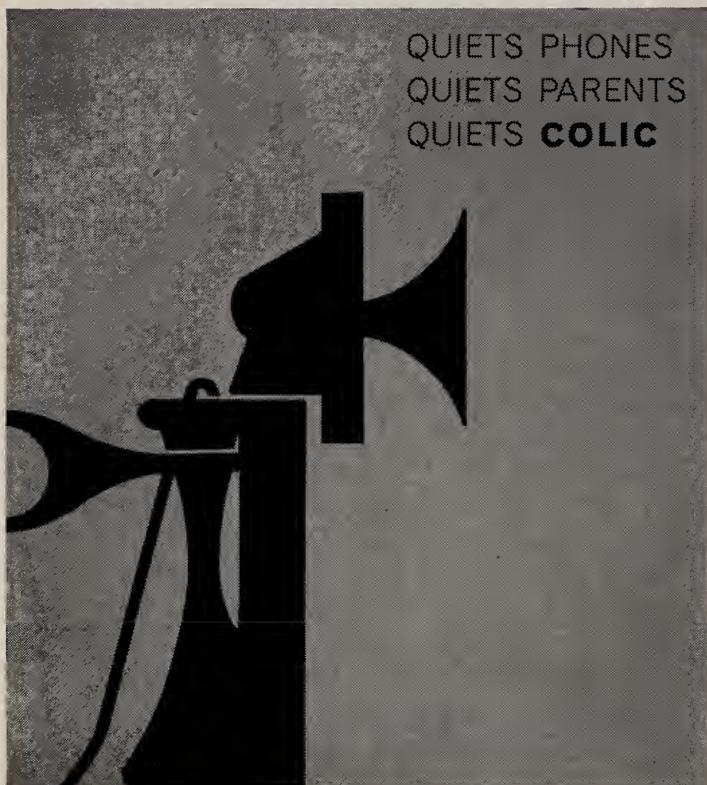
#### **Ninth Annual Medical Progress Assembly Sponsored by Birmingham Academy of Medicine**

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Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, J. Tennessee M. A., 35:132, 1950.

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# Journal of the Tennessee Medical Association

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**Diabetes mellitus and gout are not infrequently associated, a fact not generally known. In diabetes of the mature adult, a search should be made for gout. The author points to the use of the thiazides as a factor in bringing gout to the clinical horizon.**

## The Gouty Diabetic or *v. v.*\*<sup>\*</sup>

RICHARD L. WOOTEN, M.D.† Memphis, Tenn.

The looking glass of disease catches reflections of other abnormalities; a mirror reflects side images if not held too closely to the object—and sometimes these side images may be as significant as the principal object. A telescope focused on a star denies the viewer the glory of a galaxy. The following empiric observations will attempt to enlarge the view and bring into focus a combination of two metabolic diseases that may exist in many more individuals than we realize.

"The gouty diabetic or *v.v.*" does not mean a new triad, a new syndrome, or a new abbreviation. The "*v.v.*" is simply the Latin of *vice versa*. This two-sided metabolic state has received very little attention during the past century. In the 19th century the relationship and importance were much more widely studied. Interest dwindled and not much was written about the gouty diabetic or the gout with diabetes. In 1952, Joslin<sup>1</sup> reported the incidence of gout in diabetics to be 1:1500. In the past 10 years, however, articles have appeared indicating renewed interest in the problem and the association of the two diseases is becoming more realistically significant. Bartels<sup>2</sup> reports twice the expected incidence of diabetes mellitus in gouty patients as compared to the general population. The probable reasons are: (1) A more thorough approach to the routine study of the patient's basic metabolism, and (2) the widespread use of the thiazide compounds.

\*Read at the meeting of the Tennessee Diabetes Association, April 19, 1966, Gatlinburg, Tenn.

†From the Department of Medicine, University of Tennessee College of Medicine, Memphis, Tennessee and the Baptist Memorial Hospital, Memphis, Tenn.

Recent clinical and laboratory observations by several groups indicate certain pathophysiologic features affecting directly or indirectly the inter-relationship between carbohydrate and uric acid metabolism.<sup>3, 4</sup>

(a) Uric acid is chemically related to alloxan and can be oxidized to alloxan *in vitro*. It has been shown in glutathione deficient rabbits that defective purine metabolism leads to the production of an alloxan-like compound known to be diabetogenic.

(b) Renal retention of uric acid can be produced by a high fat diet and relieved by a high carbohydrate diet.

(c) Marked hyperuricemia is often seen in diabetic acidosis.

(d) Increase in blood lactate diminishes renal excretion of uric acid.

(e) Recently 6 patients with glycogen storage disease had associated hyperuricemia.

(f) The increased frequency with which uremia causes both an elevated uric acid and blood sugar.

This last observation brings up an apparent contradiction. It has been shown that insulin requirement drops in diabetics who develop renal disease and uremia, for example, the reports of patients with Kimmeliel-Wilson disease. Therefore, we might suppose that the increase in uric acid associated with renal failure may be responsible for the amelioration of the diabetic state and the reduced insulin requirements.

We know from observers (Beckett<sup>5</sup>, Bartels<sup>2</sup>) that, in general, a person with gout will improve if diabetes develops. Such observations support the theory of hyperuricemia in renal failure improving the diabetic state but does not support the report-

ed alloxan-like action of uric acid. Such inconsistencies, however, stimulate further thought and investigation. Bartels has suggested that the hyperuricemia first produces an alloxan-like effect on carbohydrate metabolism and a diabetic state. The resulting high glucose load as mentioned before would then lessen the uric acid retention at the tubular level and decrease the serum uric acid.

### Clinical Material

A review was made of all patients diagnosed as having both gout and diabetes at the Baptist Memorial Hospital between 1956 and 1966. Twenty-nine cases were suitable for study. The criteria of a normal BUN., a fasting serum uric acid level greater than 6.5 mg.%, and a two-hour post-prandial blood sugar of 130 mg.% (Somogyi-Nelson method) were satisfied. Twenty-four patients were over the age of 50 and 5 were between 39 and 49 years of age. The 6 women were all over the age of 57 and asymptomatic. The fact that 6 were female suggests a higher incidence of gouty diathesis in diabetic females than in the nondiabetic population.

Proteinuria was found in all patients. Serum cholesterol levels were elevated (over 250 mg.%) in 11 of 17 cases recorded. All patients were reported overweight. The family history of 25 patients was negative for gout but positive for diabetes mellitus in 11 of these.

### Diabetes

Most authors agree that gout appears first, followed by diabetes. In this series, however, 50.7% showed diabetes first.<sup>2,5,6</sup> The duration of diabetes known in 21 patients indicated that 15 patients were so diagnosed more recently than 5 years. This point may be invalid because these 15 patients may have had carbohydrate intolerance longer than indicated—diabetes in gout is the mild, frequently asymptomatic diabetes of the maturity onset type.

Twenty-four of the 29 diabetics were easily controlled on diet and oral agents or diet alone. In all cases diabetic control was smooth and there were no reported acidotic or hypoglycemic episodes. Critical gout did not affect diabetic control and diabetic control did not influence the degree of criti-

cal gout. It would seem that while gout and diabetes may be wedded in these patients, each disease maintained a degree of distinction.

### Gout

The onset of diabetes seemed to ameliorate the course of gout. This is in agreement with all previous reports. Bartles<sup>2</sup> presented 3 cases of gout in which the key to suspecting and diagnosing asymptomatic diabetes was an unexplained improvement in the patients' gout.

Advanced tophaceous gout was present in 2 cases. Acute gout (noted only in 3 patients) was easily controlled with colchicine and all patients received long term probenecid therapy.

It would be well to emphasize the importance of routinely determining the fasting serum uric acid. Larval gout can exist for many years without critical symptomatic episodes and in those individuals a differentiation must be made between gout and primary hyperuricemia. All male patients included in this report had had at one or more times acute symptomatic gout.

### Features Common to Both

The importance of such a double-imaged metabolic dysfunction can best be appreciated by the following dual characteristics:

TABLE 1

1. Obesity
2. Atherosclerosis
3. Familial incidence of diabetes is higher
4. Greater severity of disease in the younger patient
5. Peak incidence in middle life
6. Both diseases aggravated by stress
7. Facility of both diseases to respond adversely to thiazide compounds

The last feature is important at the present time because of the widespread use of the thiazide drugs and probably is responsible, as indicated previously, for an apparent increase in the number of gouty diabetics. Thirty-eight percent of the patients in this series had been taking thiazide compounds. In 2 cases it was clearly evident that the diabetic developed gout within a year after starting thiazide medication.

The exact mechanism of action is not known. Probably the thiazides interfere

with tubular secretion of uric acid, resulting in increased serum uric acid. Schwab, et. al<sup>7</sup> reported a patient receiving chlorothiazide continually for 4 years and who developed, in sequence, hyperuricemia—acute gout—hyperglycemia—coma. Usually, the gout brought forth by thiazides is mild as is the diabetic fault.

The associated disease states found in this series also indicate the close relationship between gout and diabetes.

TABLE 2

Hypertension	— 11
Heart failure	— 6
Peptic ulcer	— 6
Vascular disease	— 9
Peripheral vascular disease	2
Coronary occlusive disease	6
CVA	1
Renal stones	— 3
Gallstones	— 3
Cancer	— 2
Pancreatitis	— 2
Cataracts	— 1
Glaucoma	— 1

Of interest is the same incidence of gallstones (known to be more common in diabetics) and kidney stones (known to be more common in gout). The number of patients with peptic ulcer disease is suspiciously higher than might be expected. Yet, all of these ulcer patients were men in their fifth decade and the seemingly high incidence might lend support to the recent observations proclaiming gout as the dis-

ease of the business executive—a group also known to have a higher ulcer rate.

### Conclusion

A marriage of diabetes and gout is a legitimate and documented event. Each partner retains his identity but tends to soften the bad features of the other. Consanguinity seems to exist in many of these marriages. Because of the present day promiscuous use of thiazides, we should begin to watch carefully for positive blood tests of hyperuricemia in all diabetic partners. Otherwise, many of these weddings will be missed.

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Kitchen killers may include household chemicals such as detergents, ammonia, silver and brass polishes, disinfectants, room deodorants and insect poisons. They may be under the kitchen sink in easy reach of children.

Medicines cause most accidental poisonings in children, and aspirin leads the pack. Cosmetics,

deodorants, shaving lotion and unlabeled medicine can poison adults who take them in the dark without reading the labels.

Garden aids, such as insect sprays, weed killers and fertilizers may benefit your plants, but they can kill children. Store garden chemicals out of reach of children. When applying, keep preparations away from eyes, nose, mouth and skin.

In the bedroom, never leave cosmetics and pills on tabletops or in low drawers where children can find them. Mothballs are a hazard if you store winter clothes in a low chest or drawer that children can reach.

Some final precautions—label everything, keep medicine in a locked cabinet, never store chemicals in food or beverage containers or on food shelves, date medicines and discard old drugs, use only prescriptions ordered for you by a physician, do not contaminate food or utensils with insect sprays, aerosols, rat poisons, weed killers or cleaning agents, and, keep potential poisons out of children's reach.

After reviewing the pathophysiology of the hypoxic myocardium, the author considers preventive measures hopefully to reduce the high incidence of "coronary" disease among the U.S. population. He points especially to physical activity and a reduction in stressful living as especially salutary in prevention.

## Origin and Prevention of So-Called "Coronary" Heart Disease\*

W. RAAB, M.D.,† Burlington, Vt.

Coronary atherosclerosis is the most common and the most important predisposing pathogenic factor in the origin of myocardial hypoxic pain, necrosis, fibrosis, failure and death. Nevertheless, the traditional use of the term "coronary" heart disease is unfortunate because it has for decades maintained a mental block, even among leading cardiologists, by excluding from clinical thinking some of the most fundamental neurogenic, hormonal and metabolic nonvascular causes of hypoxic degenerative myocardial disease.

Besides, the common indiscriminate application of such diagnostic labels as coronary "thrombosis" or "occlusion" ignores the fact that in 50 or more per cent of clinically manifest "infarctions," autopsy does not reveal the presence of fresh thrombi or other forms of vascular obstruction near the site of necrotic foci. Some pathologists are even doubtful as to whether post mortem detectable thrombi do not constitute a hemodynamically elicited sequel rather than the cause of adjacent infarctions.

What then is the nature of the other, non-vascular elements involved in the origin of not simply "coronary" but pluricausal myocardial degenerative and necrotic disease?

### Combined Vascular and Metabolic Pathogenesis of Myocardial Damage

Paramount for the understanding of localized hypoxic or anoxic conditions in the heart muscle is the realization that the all-important availability of oxygen to the myocardium, like the availability of money

in business, does not depend solely on vascular oxygen supply (i.e., income) but equally so on its logically inseparable corollary, the simultaneous, fluctuating oxygen consumption (i.e., expenditure). In other words, the customary interpretation of myocardial anoxia merely in terms of the coronary "plumbing" disregards those factors which determine the sound balance or detrimental discrepancy, respectively, between myocardial oxygen supply and consumption.

It has long been known that the latter is to a large extent regulated by the autonomic nervous system. The sympathetic, by liberating metabolically powerful catecholamines (epinephrine from the adrenal medulla and norepinephrine from the intramyocardial adrenergic nerve terminals) greatly augments myocardial oxygen consumption, whereas the vagus and certain hypothalamic sympathoinhibitory mechanisms exert an opposite, oxygen-economizing effect.

As long as the coronary arteries are young, supple, and capable of ample dilatation, any rise of myocardial oxygen consumption is promptly accompanied by a compensatory increase of coronary blood flow. Thus, an augmented liberation of adrenergic catecholamines, unless excessive (e.g. in cases of pheochromocytoma), will remain innocuous.

By contrast, in the presence of coronary rigidity or stenosis, increases of sympathetic neurosecretory catecholamine action, even within physiologic limits, create the danger of an anoxiating disproportion between vascular oxygen supply and myocardial oxygen consumption. Such discrepancies occur particularly frequently in the subendocardial layers of the left ventricle where coronary ramifications are exposed

\*Read at the joint meeting of the Tennessee Academy of Preventive Medicine and Public Health and the Tennessee Industrial Medical Association, April 19, 1966, Gatlinburg, Tenn.

†Emeritus Professor of Experimental Medicine, University of Vermont, Burlington, Vermont.

to hemodynamic compression from within the ventricular cavity when the blood pressure rises.

When the coronary blood supply lags behind oxygen demands, the distribution of glycogen and potassium in the myocardial tissue becomes deeply disturbed as the initial phase of necrotic destruction.

Recent studies have shown that the potentially cardiotoxic effects of sympathetic catecholamine action are greatly intensified by interference of adrenal cortical hormones which, by their own action, deplete the vital potassium reserves of the myocardium.

Thus, degenerative destruction of the heart muscle must be interpreted in terms of both sclerotic vascular lesions and superimposed neurogenic-hormonal disturbances of oxygen economy and electrolyte balance.

#### **Role of Dietary and Living Habits in Cardiac Pathogenesis**

The excessive dietary fat intake in most Western nations has been recognized over the past 30 years as a probable leading cause of atherosclerosis, even in young individuals. Saturated animal fats and cholesterol seem to be the main culprits. More precise data on this problem are to be expected from the current large-scale "National Diet Study" conducted by the U. S. Institute of Health.

By comparison with these lavishly supported investigations, only minimal attention had been paid until recently to the above-mentioned, fundamentally important neurogenic and hormonal factors involved in the origin of rampant degenerative heart disease.

Three peculiarities of Western and, in particular, American civilization are to be made largely responsible for the approximately 250,000 premature (i.e. below age 65) annual cardiac deaths in the U. S. A. All of these three factors share the basically pathogenic feature of an exaggerated, oxygen-wasting sympathetic-adrenergic activity, superimposed on inadequate coronary compensatory dilatability. They are the following:

(1) *Sedentary living* with insufficient physical activity. This is demonstrably ac-

companied by a steadily elevated cardiac sympathetic tone (increased heart rate, shortening of the isometric tension period of the left ventricle), resulting from a deteriorated vagal and sympatho-inhibitory counter-regulation.

(2) *Socio-economic emotional and environmental sensory stresses* (tensions, anxieties, frustrations, annoyances by noise, etc.) without appropriate motor outlets (suppression of fight and flight reflexes). These stresses are accompanied by hypothalamic stimulation and by a thus elicited markedly increased sympathetic catecholamine activity. They are apt to produce cardiac acceleration, arrhythmias, electrocardiographic signs of myocardial anoxia, anginal attacks and, ultimately, myocardial necroses, if coinciding with coronary vascular lesions.

(3) *Tobacco smoking*: Nicotine is an exquisitely sympathetic-stimulating agent, acting via the peripheral ganglia, and capable of eliciting clearly anoxic responses of the myocardium.

Epidemiologic data to substantiate the above outlined concepts of pathogenesis are available in abundance in the contemporary world literature

A three- to four-fold higher incidence of cardiac morbidity and mortality among sedentary, compared with physically active, occupational and social groups has been observed in a steadily increasing number of large-scale statistical studies in England, the U. S. A., Germany and the U.S.S.R. Of special interest are investigations of this kind concerning inhabitants of communal settlements in Israel because they represent a racially homogenous subject material, living under identical climatic, nutritional and housing conditions, with only occupational differences to account for the markedly higher cardiac mortality among the sedentary than among the physically laboring groups.

Beyond this, the far higher survival rate of persons afflicted with coronary infarctions who had previously led a physically active life, as compared with that of formerly sedentary ones, points in the same direction.

Emotionally high-strung, ambitious, restless personality types, as well as emotional-

ly and intellectually stressful occupational categories, such as general medical practitioners (vs. e.g. dermatologists and pathologists), were found conducive to a high incidence of degenerative heart disease, whereas the opposite was the case in emotionally placid and carefree living populations.

The susceptibility to hypoxic degenerative heart disease is notoriously augmented among heavy smokers but drops abruptly to a lower level when smoking is discontinued.

#### Principles of Prevention

With the pluricausal origin of degenerative hypoxic heart disease in mind, it is possible to rationally deduce those practically applicable principles which, in fact, are today widely advocated (even though only very sporadically put into effect in Western countries).

Restriction of saturated animal fats and cholesterol in the diet lowers the serum cholesterol level and is expected to retard the development of atherosclerosis. A prolonged follow-up of adherents to the "Prudent Diet" of the New York "Anti-Coronary Club" and to a Chicago dietary program have already provided encouraging results.

No large-scale prospective comparisons between sedentary and vigorously exercising groups with regard to cardiac morbidity and mortality have yet been carried out. However, among a large number of systematically trained post-infarction patients in Israel the occurrence of infarctions and cardiac mortality proved remarkably low. Favorable changes of myocardial function and metabolism as a result of physical training are manifested by a regularly occurring diminution of the heart rate and prolongation of the isometric period, both at rest and in response to exercise as well as to emotional and sensory stresses. All of these features indicate a reduction of oxygen-wasting cardiac sympathetic tone and over-excitability, and an oxygen-economizing elevation of vagal tone. Contrasting with the powerful influence of physical training on cardiac autonomic nervous regulation, no major effects are noticeable with regard to the blood pressure level. Serum cholesterol is frequently but not regularly lowered after prolonged training,

and there is only little evidence in favor of a significant antiatherogenic effectiveness of muscular activity. Its value rests mainly in a marked improvement of the autonomic nervous regulation of myocardial efficiency and oxygen economy.

A further important bonus of physical training, now under intensified study, seems to be the building-up of an enriched potassium reserve in the heart muscle. This is probably facilitated by the transfer of potassium into the myocardium from the skeletal muscles which pour relatively large quantities of potassium into the blood stream during vigorous contractile activity. In well-trained individuals this phenomenon was found augmented. It may offer an explanation of the only recently appreciated and unexpected fact that even individuals with advanced coronary atherosclerosis who had experienced myocardial infarction and who suffer from angina pectoris can develop astonishing degrees of exercise tolerance and physical fitness if cautiously trained over longer periods from small, meticulously supervised beginnings.

Finally, in the presence of an already partially compromised coronary vascular supply, the development of new collateral vessels seems to be favored by physical activity.

Prevention of emotional and sensory overstimulation of the hypothalamo-sympathetic system, and associated overproduction of cardiotoxicity-potentiating 17-hydroxycorticosteroids from the adrenal glands is theoretically feasible by elimination of detrimental emotional tensions and anxieties, and sensory annoyances. Obviously, the competitive, acquisitive pattern of our civilization does not lend itself well to such desirable environmental and social adjustments.

Abstinence from smoking frees the heart from the partially contributory pathogenic factor of incessantly repeated bombardments with brief but potent ganglia-mediated catecholamine discharges into blood and myocardial tissue.

#### Practical Preventive Measures

Although the 55% cardiac mortality of the American people would justify an early

adoption of rational rules of prevention by everyone, their recommendation must be most emphatically aimed at those in whom appropriate screening procedures have detected objective signs of so-called "coronary-proneness" (hereditary predisposition, hypertension, hypercholesterolemia, etc.), as revealed by the "Framingham Study" and other similar statistics. A new test to evaluate the autonomic regulatory and metabolic status of the heart muscle itself was recently developed at the University of Vermont.

Practical rules for antiatherogenic nutrition can be found in many special manuals, e.g., in the "Prudent Diet," issued by the New York City Board of Health.

Physical reconditioning of degenerating sedentary individuals requires gradually increasing, preferably daily, vigorous exercising practices, lasting for at least 15 to 20 minutes and involving a maximal amount of muscular mass, including that of the legs. Easily feasible home exercises are: running on the spot, jogging, straddle hops, medium knee bends, arm swinging, etc. Brisk walking out of doors, parking the car at a distance from the working place, avoiding elevators, swimming, hiking, cycling and sports activities provide additional benefits.

Slow-walking, golf, isometric and static or mere strength exercises, such as weight lifting, and various gadget-supported pseudo-exercises are practically without value for heart reconditioning. Exercise breaks during working hours have been introduced in industrial plants and offices in the U.S.S.R., Sweden, Japan and other countries.

Abstinence from smoking, although difficult for most addicts, pays impressive dividends in terms of demonstrably reduced cardiac morbidity rates, apart of protection from pulmonary complications.

Emotional and environmental relaxation, combined with systematic physical training, hiking, mountain-climbing, outdoor sports, etc., is most effectively achieved in rural preventive reconditioning centers. In Europe, nearly 3000 such government-, industry-, and insurance-sponsored centers accommodate about 5 million tense, fatigued and deteriorating workers, employees and

executives per year. The sojourns last 4 to 6 weeks without cost or loss of regular vacation periods, and are regarded as a both medically and economically valuable system for the "preservation of manpower and increase of production." Experience has shown that the temporary "getting-away-from-it-all" in a serene, scenically attractive surrounding, and its "rejuvenating" effect produce a psychologically strong impact on the individual's motivation for continued adherence to those health rules in which he had been indoctrinated and which he had found subjectively effective during the stay at a center.

Objective studies in special reconditioning research institutes abroad have demonstrated a substantial suppression of cardiac sympathetic overactivity in reconditioning trainees, and a frequently occurring normalization of pathologic electrocardiograms, as well as a marked reduction of absenteeism over subsequent years.

Paradoxically, neither the unparalleled and uncontrolled mass mortality from degenerative heart disease among the American people nor several years of effort toward the establishment of at least one pilot preventive reconditioning center here have yet sufficed to instigate any large-scale organized preventive action by governmental and other responsible health agencies in this country. Educational policies in American medical schools to create a new generation of prevention-oriented physicians are equally lacking.

Discontent with this perennial state of lethargy on the national level is mounting in both lay and professional circles. Therefore, a number of communities and individual physicians have begun to organize active local prevention groups in cooperation with Y.M.C.A.'s and qualified physical educators with, so far, limited but encouraging results.

### Summary

Contrary to still widespread beliefs, hypoxic, so-called "coronary," heart disease is not caused merely by coronary atherosclerosis but by a multiplicity of pathogenic factors among which myocardial oxygen-wasting sympathetic adrenomedullary over-ac-

tivity, probably in conjunction with an overproduction of potassium-depleting adrenal 17-hydroxycorticosteroids, is most prominently involved.

Rational preventive measures consist (a) in a dietary reduction of atherogenic saturated animal fats and cholesterol and (b) in the avoidance of living habits and environmental circumstances which elicit a detrimental, sustained elevation of the cardiac sympathetic tone and excitability, i.e., sedentary living, socio-economic tensions and anxieties, sensory annoyances (noise, hectic "entertainments"), and tobacco smoking.

In the absence of an adequate, large-scale organisatory initiative on the part of health

authorities and agencies, small local "heart attack prevention" programs are beginning to be organized in communities throughout the country to combat its unparalleled, uncontrolled and unnecessary mass mortality from hypoxic degenerative heart disease.

*The author recommends for reading:* (1) Blumenfeld, A.: Heart Attack: Are You a Candidate? Paul S. Eriksson, Inc., New York, 1964; (2) Raab, W.: The Nonvascular Metabolic Myocardial Vulnerability Factor in "Coronary Heart Disease"—Fundamentals of Pathogenesis, Treatment and Prevention, Am. Heart J. 66:685, 1963; (3) Raab, W. (Editor): Prevention of Ischemic Heart Disease. C. C. Thomas, Springfield, Illinois (in press); (4) Stamler, J.: Preventive Cardiology. Grune & Stratton (in press); (5) TIME & LIFE Books: The Healthy Life, New York, 1966.

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#### THE NATURE AND PREVENTION OF PROSTHETIC VALVE ENDOCARDITIS. Stein, Paul D., Harken, Dwight E., Dexter, Lewis: Am. Heart J., 71: 393, 1966.

The records of 288 consecutive patients who underwent prosthetic valve implantation at the Peter Bent Brigham and Mount Auburn Hospitals were reviewed. There were 162 aortic valve replacements, 105 mitral valve replacements and 22 double valve replacements. Two hundred and forty-three patients received no specific anti-staphylococcal prophylaxis (Methicillin) after operation. Forty-five patients received various regimens of prophylactic methicillin and oxacillin. Thirty-five patients of the entire group of the 288 patients (12%) had one or more positive blood cultures in association with fever.

Staphylococci were cultured most frequently from the blood after prosthetic valve surgery. Staphylococcus was the offender in 13 of 17 patients with proven septicemia in this study and 18 of 26 patients reported in the literature. Of 95 patients with septicemia associated with heart surgery other than with prosthetic valve implantation who were reported in the literature, 67 were infected with staphylococci. Therefore, the instances of staphylococci as the cause of septicemia in patients who underwent all types of heart surgery as accumulated from many reports was 71%. In nonprosthetic valve surgery coagulase-negative staphylococcus aureus was reported as frequent as coagulase-positive staphylococcus aureus as a cause of septicemia.

In this study the classic signs of endocarditis was few. None of the patients had a palpable spleen, splinter hemorrhages, Osler's nodes or Janeway lesions at the time of the first positive blood culture. Only one patient had petechiae. In many cases treatment was delayed because of the lack of signs of endocarditis.

From this study and from reports quoted by the authors, early treatment with specific anti-staphylococcal therapy should be instituted in a patient undergoing heart surgery who has a unexplained fever postoperatively. It was also their opinion that bacterial endocarditis could be virtually eliminated with ten days or more of methicillin and oxacillin prophylaxis. They refer to another study in which 619 patients were given prophylactic methicillin, 4 to 8 Gm daily, until oral medication could be given, at which time oxacillin, 2 Gm. daily was given for a total of at least 10 days. Many of the patients were given oxacillin for as long as 3 months after valve implantation. Allergic patients were given chloramphenicol. There was only one fatal infection among this group of 619 patients, a fatal case of Pseudomonas septicemia from wound infection.

The present study reports that the incidence of fatal bacterial endocarditis in patients treated prophylactically is 0.2%, a decrease from the 3.7% mortality due to endocarditis in those not treated prophylactically. (Abstracted for The Middle Tennessee Heart Association by Andrew Spickard, M.D., Nashville, Tenn.)

The author reviews the several methods of managing this fracture-dislocation. He describes good results by a simple closed method of reduction.

## Finger Fracture-Dislocation Proximal at the Interphalangeal Joint\*

PAUL SPRAY, M.D., Oak Ridge, Tenn.

In 1959, I presented photographs and x-ray findings in 5 patients who had fracture-dislocation of the proximal interphalangeal joint and were treated by closed reduction and Kirschner wire fixation through the joint.<sup>2</sup> Shortly after this was published, Dr. John Killeffer pointed out in a personal communication that this injury could be treated just as successfully, and more easily by immobilization for 3 weeks in flexion.

Two patients have since been treated by simple immobilization in marked flexion, using adhesive tape, with good results.

### Method

The finger was taped into the palm using  $\frac{1}{2}$  inch strips of ordinary adhesive tape applied to the sides of the finger, and reinforced by two additional strips of tape around the middle and distal phalanges. (Fig. 1.) The ends of the longitudinal



FIG. 1. Method of attaching tape to the finger. strips were wrapped around the wrist. They were reinforced by additional circular strips of 1 inch width adhesive. The finger was placed so the end of the finger was about  $\frac{1}{2}$  inch from the base of the palm, thus permitting some motion in the finger joints. (Fig. 2.)

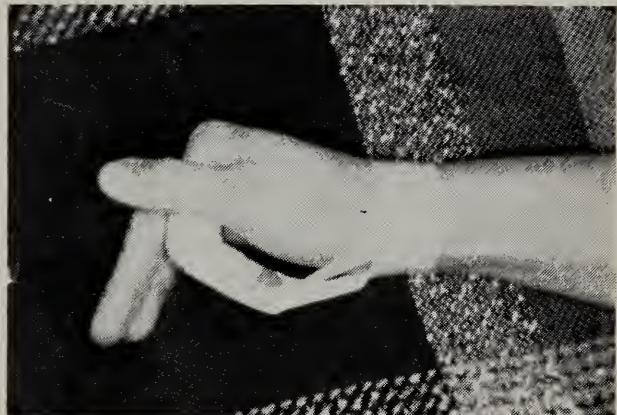


FIG. 2. Completed taping.

### Case Reports

Case 1. This patient injured his right ring finger in handling a horse. He was treated initially by another physician with pulp traction on a Bohler type splint. This failed to reduce the fracture-dislocation (Fig. 3). Splint removed 2



FIG. 3. (Case 1) Pulp-traction on Bohler splint failed to reduce the fracture-dislocation.

days later and the finger taped in flexion for 2 weeks. At 7 year follow-up motion was normal (0 to 100 degrees) (Fig. 4).

Case 2. This patient injured the right little finger by catching it in the steering wheel of a car. The finger was taped in flexion for 5 weeks. At 5 month follow-up motion was 30 to 80 degrees.

### Comment

Though only 2 patients have been treated by the method of taping the finger in flexion, I believe the results justify continuing

\*Read at the meeting of the Tennessee State Orthopaedic Society, April 17, 1966, Gatlinburg, Tenn.

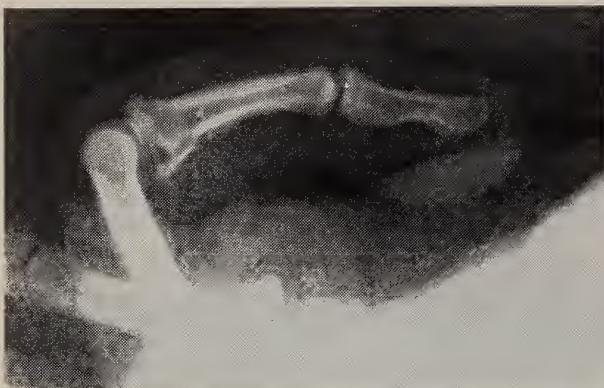


FIG. 4. (Case 1) Fracture-dislocation reduced by taping in flexion.

with this method rather than using a Kirschner wire through the joint. Although the results from immobilization with the Kirschner wire were also considered satisfactory, the taping method is much simpler and easier.

Since this paper was presented to the Tennessee Orthopaedic Association, in Gatlinburg, the April 1966 issue of the *Journal of Bone and Joint Surgery* has appeared with an article by Wilson and Rowland<sup>2</sup> advocating open reduction and internal fixation of this type of fracture. The results do not seem to indicate the need for this form of treatment. Although their results were satisfactory, they do not appear to be superior to those in the patients I have treated either with the taping method or by closed reduction and immobilization with a Kirschner wire. I believe open reduction should be reserved for late cases in which reduction is impossible by a closed method.

Wilson and Rowland refer to the method of treating this type of fracture described by Schulze<sup>3</sup> in 1946. (This consisted of just putting adhesive tape around the proximal and middle phalanges with the joint in tight flexion for 7 to 10 days, and then grad-

ually letting the joint out into more extension in a protective splint until 3 weeks after the injury.) They state they disagree with this method because, "First, accurate articular alignment is extremely difficult to achieve by closed methods. Second, if the proximal interphalangeal joint is held in an acutely flexed position long enough for the volar lip fragment to unite, an unyielding contracture will probably result." Though I have not had personal experience with Schulze's method, there was no difficulty in obtaining an adequate reduction or with unyielding contractures in the 2 cases treated by the method of taping presented in this article. In one case there were only 50 degrees of motion at the end of 5 months, but there was continued improvement.

### Summary

Though acute fracture-dislocations of the proximal interphalangeal joint can be satisfactorily treated by open reduction and internal fixation, or by closed reduction and immobilization with a Kirschner wire through the joint, 2 cases are presented in which satisfactory results were achieved by the simpler and easier method of taping the finger in flexion. I believe that open reduction should be reserved for late cases.

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The author makes a plea to discontinue the routine use of the nasal tube and gastric suction. He points to the smoother postoperative course by its elimination.

# Intra-Abdominal Surgery Without Gastrointestinal Decompression

W. EDWARD FRENCH, M.D.,\* Memphis, Tenn.

Many a surgical patient is made most uncomfortable in the attempt to prevent complications from his operation and many of the procedures used to prevent these complications are unwarranted. Such may be said of the routine use of nasogastric suctioning following intra-abdominal surgery. The morbidity, and even mortality, associated with nasogastric tubes was thought so severe as to warrant still another potential danger in the recommendation of such a procedure as suction gastrostomy, advocated by many leading surgeons.<sup>1,2</sup>

In the past few years several articles have appeared describing minor and occasional major complications of nasogastric suctioning<sup>3-6</sup>, as well as complications of tube gastrostomy.<sup>7,8</sup> Subsequent reports have dealt with the elimination of postoperative nasogastric suctions.<sup>9-12</sup>

Much of the controversy concerning the need of postoperative nasogastric suctioning occurred, perhaps, because of the misinterpretation of the term "paralytic ileus." As suggested by Gerber and his group<sup>9</sup>, paralytic ileus is not a complication but a normal physiologic response following any type of gastrointestinal assault. It may be reflex stimulation of sympathetic nerve pathways. Abdominal distention, which may occur concurrently or without paralytic ileus, is a complication and should be prevented if possible.

Whether or not one equates abdominal distention with paralytic ileus, there is universal agreement that abdominal distention should be prevented or alleviated and because of this many continue to use some form of intestinal decompression.

According to Gerber, no useful purpose is served by removing the 8,500 ml. of fluid normally secreted by the gastrointestinal

tract. Indeed, the removal of even a portion of this fluid may lead to serious electrolyte disturbance. Therefore, intestinal decompression is chiefly concerned with the removal of "gas" within the gastrointestinal tract. Consequently, if this gas can be prevented from occurring within the gastrointestinal tract, the need of intestinal suctioning may be eliminated.

The source of gastrointestinal gas is now a well accepted fact. The means of preventing this "swallowing of air" is not so generally agreed upon. It is not difficult to realize that anything placed within the mouth or pharynx will lead to a certain amount of swallowing. It has been shown conclusively that the nasogastric tube stimulates swallowing, and unless the tube's suctioning is working properly and constantly, this swallowed air cannot be completely removed and there is some which will not be removed even when the tube works properly.<sup>4</sup> One may then postulate that some degree of distention inevitably results if the nasogastric tube is used.

This "swallowed air" lends importance to the order of "nothing by mouth," and this does not pertain only to food, but to anything placed within the mouth, be it cracked ice, chewing gum, or Life Savers. Chewing gum stimulates salivation which precipitates the need for swallowing.

At no time is it thought advisable to use nasogastric suctioning in patients who are to undergo elective intra-abdominal surgery. Postoperatively, nasogastric tubes are used to treat complications such as persistent vomiting, uncontrollable by antiemetics, or excessive abdominal distention and the tube is not used to prevent these complications.

The nasogastric tube has considerable value as a diagnostic tool, and upon occasion, may be an aid in the proper care of certain gastrointestinal diseases. However,

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it seems the need for the nasogastric tube is lessening both in the management of certain diseases of the gastrointestinal tract and particularly in the routine use of such tubes postoperatively in patients undergoing intra-abdominal surgery. Indeed, surgeons are reporting the successful outcome of almost any type of intra-abdominal operation without the use of the tube preoperatively or postoperatively.

The nasogastric tube has been found unnecessary in perforated duodenal ulcer, vagotomy, with any type of gastric procedure, operations for obstruction or resection of the small or large bowel, abdominoperineal resections, etc. The tube is used neither preoperatively or postoperatively.

The following are my usual postoperative orders in a patient undergoing vagotomy and hemigastrectomy, Billroth I or II:

*Day of Surgery:*

- (1) Nothing by mouth
- (2) Sedative (Morphine or Demerol)—use sparingly
- (3) Antiemetic
- (4) 100 cc. 5% glucose in saline tonight and daily
- (5) 1000 cc. 5% glucose in water twice daily
- (6) B.P. and pulse q. 1 hr.
- (7) Turn q. 1 hr.
- (8) Catheterize q. 8 hr. p.r.n.—may stand to void in 6 hrs. if attended

W. E. F.

*First Postoperative Day:*

- (1) Out of bed several times today
- (2) Bathroom privileges
- (3) Hematocrit at 8 A.M.

W. E. F.

*Second Postoperative Day:*

Encourage to be more active

W. E. F.

*Third Postoperative Day:*

*Fourth Postoperative Day:*

- (1) Tap water 60 cc. by mouth q. 1 hr. from 7 A.M. to 7 P.M.

(2) Do not force water— withhold if sense of fullness exists

- (3) Omit one I.V. of 5% glucose in water

W. E. F.

*Fifth Postoperative Day:*

- (1) Tap water ad lib
- (2) Surgical liquids 120 cc. q. 2 hrs. from 7 A.M. to 7 P.M.
- (3) Only one I.V. of 5% glucose in water today
- (4) Encourage to be more active

W. E. F.

*Sixth Postoperative Day:*

- (1) Discontinue I.V.'s
- (2) Hematocrit this A.M.

- (3) Soft bland diet—small feeding 5 times daily

W. E. F.

*Seventh Postoperative Day:*

- Sutures removed
- Discharge

W. E. F.

**Summary**

Routine nasogastric suction is not indicated following most abdominal surgery. The tube is used neither preoperatively or postoperatively.

Abdominal distention may be prevented and treated by withholding oral intake.

Patients undergoing abdominal surgery and in whom intubation is not used will have a smoother convalescence, fewer complications, will be more easily maintained in fluid and electrolyte balance, and will require less house staff and nursing care than if subjected to nasogastric suctioning.

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## CLINICOPATHOLOGIC CONFERENCE

### Veterans Administration Hospital\*

#### Amebic Colitis and Peritonitis

**Present Illness.** This 73 year old Negro man had enjoyed good health until about 2 months prior to admission when he developed rather sudden cramping suprapubic abdominal pain. This was intermittent and occurred about twice each day lasting 30 to 60 minutes. It was not related to food intake, and the patient denied any food intolerances or indigestion. He had taken no medications. About 2 weeks before admission he developed an urge to defecate 10 to 15 times daily and would pass small amounts of mucus at times colored with bright red blood. He had two brown stools a day, often streaked with blood. Also, for about 3 weeks he had noted ankle edema during the day which subsided overnight. There had been a loss in weight from 170 to 135 pounds over a four to five month period. A note from his doctor listed some orthopnea, but the patient denied this. The note also listed "sugar in the urine." He gave a history of syphilis and gonorrhea several times since 1918.

**Physical Examination.** T. was 99°, P. 82, R. 20, and B.P. 130/30. Pulses were equal bilaterally with a typical "water-hammer" quality, and occasional premature contractions were evident. The patient appeared both chronically and acutely ill. Examination of the head and its structures was not remarkable. There was dullness to percussion over the right lung base posteriorly. The heart was slightly enlarged. There was a Grade III to IV harsh, decrescendo, diastolic murmur heard loudest in the aortic area. No thrills or shocks were noted. The abdomen was soft, and the liver was down 4 cm. below the costal margin but not tender. There was slight deep tenderness, though without rebound or rigidity, just below the umbilicus. Bilateral hydroceles were present. Bright red bloody mucoid material was present on the finger after a rectal examination, and a firm, tender 2 cm. lump was felt on the right lateral wall and thought to be a thrombosed hemorrhoid. The prostate was moderately enlarged. Moderate pretibial edema was present. The skin was dry and scaly.

**Laboratory Data.** The WBC. was 12,000 with 80% polys, 6% bands, 9% lymphocytes, 4% monocytes, and 1% eosinophils. Corrected sedimentation rate 33 mm.; RBC. was 4.4 million, the HCT. 39%, and Hgb. 12.8 Gm.% Urinalysis revealed a rare WBC. and RBC. and 2% sugar; a 24 hour

urine for sugar on 260 cc. revealed 3.3 Gm./260 cc. Cholesterol was 250, fasting blood sugar 276, and BUN. 29 mg. per 100 cc. Electrolytes on admission were: CO<sub>2</sub> 43, Cl 90, Na 140, and K 3.8 mEq/L; later, 2 days before death they were CO<sub>2</sub> 35, Cl 100, Na 146, and K 5.4 m Eq/L. VDRL and cardiolipin CF each were 64 units. Several fasting blood sugars were more than 200 mg. per 100 cc. Total serum protein was 5.5 with albumin 2.4 Gm. per 100 cc. Acid phosphatase was 0.35 and alkaline phosphatase 2.4 BU, bilirubin 0.5 mg.%, and transminase 26 units. The Reiter complement fixation test positive 4 units. One swab culture and a smear taken from a proctoscopic examination were negative for ova, parasites, and bacterial pathogens.

A chest x-ray revealed moderate left ventricular enlargement with calcification in the aortic arch, and probably some fluid in the right infrapulmonic space. A barium enema was not entirely satisfactory, but the cecal outline was irregular. A chest film just before death revealed air-fluid levels beneath both hemidiaphragms, and a plain film revealed changes of adynamic ileus. An EKG. showed low voltage T-wave, occasional VPC, and wide QTC.

**Hospital Course.** Proctoscopic examination to a depth of 6 inches revealed a thrombosed hemorrhoid but nothing more. The findings of heart failure were treated by bed rest and a low salt diet. The urine did not show sugar after the first 2 days but because of the continuing elevation of fasting blood sugar, the patient was placed on a 2400 calorie diet, and the FBS gradually lowered to 160 mg. per 100 cc. Throughout his course he had tenesmus and three to four times daily would pass about an ounce or less of bloody mucus. He also had intermittent brown or green semisolid foul smelling larger stools. Late in his course (11th hospital day) he developed abdominal distention and became quite lethargic. He was thought to have adynamic ileus with generalized abdominal tenderness. A Levine tube produced about 500 cc. of dark brown, thick material from the stomach (guaiac positive). His entire hospital course was afebrile. On the 13th hospital day, he developed respiratory distress and expired. He was thought to have aspirated vomitus, but no one observed this.

#### Clinical Discussion

**DR. CUMMINS:** The case today involves a 73 year old Negro man who had enjoyed good health until about two months prior to admission when he developed rather sudden, cramp-like suprapubic abdominal pain.

I thought I would read this protocol and make some comments as we go along. Also, I have some questions I would like to ask as we get a little further into it. Now, the pain, as we are told here, is cramp-like, which probably means that it comes from

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the gut. I think the suprapubic location of the pain is probably indicative of lower colonic involvement. Some years back, Dr. Chester Jones made a study of pain arising from the GI tract by putting balloons into various areas of the gut and distending them. When he distended the right side of the colon, pain was generally referred to the right lower quadrant. In the transverse colon, it was referred to the upper abdomen, and in the sigmoid and below, it was generally referred to the lower part, either the left lower quadrant or the midline. So the character of the pain and its location would suggest a lesion, I think, in the lower colon. This pain was intermittent and occurred about twice each day, lasting 30 to 60 minutes. It was not related to food intake, and the patient denied any food intolerance or indigestion. He had taken no medications.

About two weeks before admission, he began to notice an urge to defecate 10 to 15 times daily, and would pass small amounts of mucus which was colored at times with bright red blood. He had had two brown stools a day, oftentimes streaked with blood. This also would suggest a lesion in the lower colon. For about three weeks, he had noted ankle edema during the day which subsided overnight. There had been a weight loss of about 35 lbs. over a four to five month period. On physical examination, the temperature was found to be 99°. The blood pressure of 130/30 shows a remarkably wide pulse pressure; and the pulses had a typical water hammer quality. The patient appeared both chronically and acutely ill. There was dullness to percussion over the right lung base posteriorly, and I think later, in the x-ray findings, we are told there was some fluid at the right lung base. The heart was slightly enlarged and there was a Grade III-IV harsh, decrescendo diastolic murmur heard loudest at the aortic area. No thrills or shocks were noted. The abdomen was soft and the liver was down 4 cm. below the costal margin, but was not tender. One wonders if this liver enlargement might be due to congestive heart failure. There was slight deep tenderness just below the umbilicus, but no rebound or rigidity. Bright red, bloody, mucoid material was present on the finger

after a rectal examination. A firm, tender 2 cm. lump was felt on the right lateral rectal wall and was thought to represent thrombosed hemorrhoids. Later on this was confirmed, I believe, by proctoscopic examination. The prostate was moderately enlarged. There was moderate pretibial edema present.

The white count was 12,000 with 80% polys and 1% eosinophils. This may or may not have any significance, but it would be a minor point against any parasitic infestation. The corrected sedimentation rate was 33; there was no actual anemia. Urinalysis showed 2+ sugar and a 24 hour urine sugar study revealed 3.3 grams in 260 cc. Cholesterol was normal, fasting blood sugar was elevated, and his BUN was 29 mg%. Electrolytes on admission were fairly normal except for a somewhat low chloride level. Two days before death, serum chloride had risen, and his potassium had also risen some. VDRL and cardiolipin fixation each were 64 units. Several fasting blood sugars were noted to be above 200 mg%. There seems to be no doubt this man did indeed have diabetes. His total serum proteins were 5.5 and albumin 2.4 grams. Acid phosphatase, alkaline phosphatase, bilirubin and transaminase were all normal. A Reiter complement fixation test was positive 4 units, which I believe almost absolutely confirms the diagnosis of syphilis. Swab cultures and smear taken during a proctoscopic examination were negative for ova, parasites and bacterial pathogens. While I don't think that we're going to make a diagnosis of parasitic infestation in this man, nevertheless I should point out that in my opinion one examination for ova and parasites is inadequate and further examinations should have been done to clinch this point. A chest x-ray disclosed moderate left ventricular enlargement with calcification of the aortic arch and probably some fluid in the right infrapulmonic space. Rather than read these x-rays, why don't we ask Dr. Ettman if he would show us the films, please.

DR. ETTMAN: The chest film shows the heart is slightly enlarged. The aorta is elongated, and we see calcification in the arch. The lung fields are clear, but at the

right base we notice the diaphragm is flattened and somewhat irregular. The costophrenic sinus is obliterated by a small amount of fluid. The barium enema shows the filling defect and the incomplete filling of the cecal areas as described in the protocol. In addition, we see a questionable lesion in the transverse colon. It is rather hazy. Films taken four or five days later are interesting. The scout film of the abdomen shows gas in the stomach, colon and small bowel. Residual barium is also seen. In addition, we see free air under the right diaphragm as well as some on the left side, and this is best demonstrated on the chest film. On one of these films, I think I see another little air pocket outside the bowel.

DR. CUMMINS: How about that cecum? Is this area of irregularity constant?

DR. ETTMAN: Yes, it is constant on all three films. However, during fluoroscopic examination, I believe it was felt that the cecum did not fill well.

DR. CUMMINS: What about the sigmoid colon?

DR. ETTMAN: The sigmoid, as far as we could tell, filled fairly well. The only area that bothers us is this irregular pattern in the upper sigmoid. It is constant on the other films, but as I say again, the man was poorly prepared at the time. In view of this constant finding, as we said in our protocol, we were very suspicious of that area being involved.

DR. CUMMINS: I think these films Dr. Ettman showed demonstrate very nicely the advantage of the upright chest film over the plain film of the abdomen in showing free air under the right diaphragm. This is an important point, I think. Many times, physicians suspecting ruptured viscus, will order a scout film of the abdomen, which does not give you nearly as much information about air under the diaphragm as the upright chest film does. An EKG. showed low voltage T-waves and occasional VPC's.

In the hospital course, it states that a proctoscopic examination to a depth of 6 inches revealed a thrombosed hemorrhoid but nothing more. Now, I would like to ask a question. Why was a proctoscope passed only to a depth of 6 inches? Was it because of spasm or pain or was an obstruc-

tion encountered, or what? Does anyone have any information about that?

DR. MILLER: There is no explanation given in the progress notes.

DR. CUMMINS: I see. The findings of heart failure were treated with bed rest and a low salt diet. The urine did not show sugar after the first two days, but because of the continuing elevation of fasting blood sugar, the patient was placed on a 2400 calorie diet and the fasting blood sugar gradually lowered to 160 mg%. Throughout his course, he had tenesmus and three to four times daily would pass about an ounce or less of bloody mucus. He also had intermittent brown or green semi-solid, foul smelling, larger stools. Late in his course on the 11th hospital day, he developed abdominal distention and became quite lethargic. He was thought to have an adynamic ileus and generalized abdominal tenderness. A Levine tube produced about 500 cc. of dark brown, thick material from the stomach which was guaiac positive. His entire hospital course was afebrile. Two days after this (I believe, on the 13th hospital day) he developed respiratory distress and died. He was thought to have aspirated vomitus, but no one observed this.

In summary, we have a 73 year old Negro man whose illness probably began four or five months prior to admission when he began to notice weight loss. In this period of time he had lost 35 lbs. in weight. Several months before admission, he began to develop crampy abdominal pain. Several weeks prior to admission, I believe, he began to notice rectal bleeding and marked tenesmus. During his course in the hospital, I think unquestionably he had a perforation of one of his abdominal organs with generalized peritonitis leading to abdominal tenderness, adynamic ileus, and air under the diaphragm.

Now I think this case must be a difficult one because it seems fairly simple, and whenever I get what seems to be a simple CPC case, I suspect that there must be a "red herring" in it somewhere. I think we can make two diagnoses on fairly safe grounds. First of all, I think he had diabetes mellitus and maybe I'll be right about that anyway. Secondly, I think he had syphilis and I think he had syphilitic

aortitis with aortic insufficiency and congestive heart failure. Then I think he also had a lesion most likely of the lower portion of the colon, which ruptured terminally and produced peritonitis. Now, what could this lesion be in a colon which bled intermittently, caused weight loss and rupture. Well, there are several things that we have need to think about. First of all, chronic ulcerative colitis could do this, but I don't think this man had ulcerative colitis. Against it is the fact that he had no proctoscopic changes. These are not always present, but certainly in at least 90% of patients who have ulcerative colitis, the rectum is involved and this diagnosis would probably have been obvious at proctoscopy. Also, it is rare for this disease to begin in a man of 73, and then, too, we have no x-ray evidence of such. So, I'm going to rule out this possibility.

Diverticulitis must also be considered. I am also going to eliminate this possibility. I think for a man to bleed intermittently like this for three weeks would be somewhat unusual. Diverticulitis bleeds—it may bleed only minimally, or it may bleed massively, but I think the sort of intermittent type of bleeding this man had would be fairly unusual. He had no fever; and I think tenesmus of this degree would also be reasonably unlikely with diverticulitis. Another lesion of the colon which can bleed, of course, is uremic colitis, and I think we can rule this out very simply because he is not uremic. His BUN was only slightly elevated. Then we are told by the x-ray department that he has some deformity of the cecum. As hard as I pressed Dr. Ettman to get him to say that this might be an artifact, he would not. So, we must consider that he might have some lesion involving his cecum. What could this be? Well, tuberculous colitis must be considered. This involves the ileocecal area and may bleed. However, we have some fairly strong points against this, I think. First of all, he has no chest x-ray evidence of active pulmonary tuberculosis, and in this day and age, I think that ileocecal tuberculosis without pulmonary involvement is exceedingly rare. He has no fever, and he has no real diarrhea. He has only tenesmus, again suggesting some lesion closer to the anus than the cecal region. So

I'm going to rule this out too. I have read about syphilitic ulceration of the colon, but I have never seen such a patient. There are described rather large, circumferential ulcerations of the colon indicative of the syphilis, but this must be an exceedingly rare situation. We have no x-ray evidence of such, and again I'm going to rule out that possibility.

Amebic colitis must be strongly considered, I think. This would perhaps solve our dilemma of a cecal lesion in association with a lesion further down in the colon. As we know, the cecum is rather commonly involved with amebic colitis. However, against this diagnosis, again, is the fact that there was no proctoscopic evidence of such. There does not have to be, however. I think the stool examination was, as we stated above, inadequate. One examination of mucus and secretion taken through the proctoscope does not rule out the possibility of amebiasis, but certainly offers no support for it either. Another point against it is that the man had no fever and no eosinophilia. Some years back we received a number of cases of amebic colitis at the University of Tennessee. We found that more than half of them did indeed have eosinophilia. I had thought that patients with amebic colitis did not, but in this series of some 30 to 35 cases, more than half of them did have eosinophilia. So we have no support for this diagnosis either, but I do feel that I cannot rule out the possibility that he did have amebic involvement of the colon with rupture, perhaps, of an amebic ulceration of the colon.

Finally, I come to what in my opinion is the most likely diagnosis, and that of carcinoma of the colon. I think it is most likely because it would seem to me that it fits better with the whole clinical picture. The man had lost 35 pounds over a 5 month period, and weight loss was his first symptom. He was in his 70's—an age group in which carcinoma of the colon occurs frequently. The carcinoma bleeds from ulceration; it can perforate the colon and could very well account for the whole picture here. We do not see a carcinoma of the colon on x-ray, but just one month ago, I had a patient operated on who had rectal bleeding. The barium enema was reported as normal, and

the patient did indeed have carcinoma of the sigmoid colon with ulceration, bleeding, and hepatic metastasis. So I do not believe that one negative x-ray study rules out this possibility. Therefore, I'm going to end my discussion by diagnosing diabetes mellitus, syphilitic aortitis and aortic insufficiency, and carcinoma of the colon, probably of the lower colon, with terminal rupture of the colon and peritonitis. I cannot entirely rule out the possibility of amebic colitis. I just would like to ask one question again or raise this subject for discussion later. I wonder why this patient was not operated upon. Apparently, he was in the hospital for almost 2 weeks and bleeding. He was not operated on during this period of time. He even lived 2 days after apparent rupture of his colon, and still was not operated on. It seems to me that possibly this might have been a correctible situation if surgically attacked. Thank you.

#### Principal Clinical Diagnosis

*Carcinoma of the colon, with rupture and peritonitis*

DR. GOURLEY: Thank you, Dr. Cummins. Are there any comments anyone would like to make on this case?

DR. LUTON: Is there more than one lesion in the colon?

DR. ETTMAN: Defects are seen in the cecum, transverse colon and sigmoid, but this was not a very satisfactory study and we requested it be repeated. We are more suspicious of the sigmoid area.

DR. WAYNE: Did the patient have an elevated temperature after it appeared that he had developed peritonitis?

DR. GOURLEY: A lot of the patients who are severely ill sometimes do not.

DR. WAYNE: The question is, were the temperatures taken?

DR. GOURLEY: Dr. Miller, who has the chart in his hand, is sitting right next to you.

DR. MILLER: It may help Dr. Cummins to know that the temperatures were not taken in the last three days.

DR. CUMMINS: I'm afraid it doesn't help at all.

DR. GOURLEY: Dr. Gompertz, are there any comments you would like to make?

DR. GOMPERTZ: I just want to know if

there were any indications on the chart as to why he was not operated upon.

DR. MILLER: The possibility of surgery was not mentioned in the chart.

DR. CUMMINS: I'm surprised the patient had no surgical consultation. Free air in the peritoneal cavity is enough indication for exploratory laparotomy.

DR. LUTON: I think the consensus was he had hopeless carcinoma.

DR. CUMMINS: We have no proof of that and thus would have no real basis for denying him surgery. Operation could possibly save his life from a nonmalignant process—or even a malignant process, if localized. Bleeding and peritonitis are complications which have to be dealt with even though the treatment, presumably surgery, be palliative.

DR. GOURLEY: If there are no further comments, the autopsy findings will be given by Dr. Carter Miller of the Pathology Department.

#### Anatomic Findings

DR. MILLER: At autopsy this was an elderly Negro male with a distended abdomen. On inspection of the major cavities, each pleural space contained about 100 cc. of straw colored fluid. Approximately 2000 cc. of foul smelling, greenish fluid was present in the peritoneal space with that in the lower abdomen being frankly purulent. The fibrinopurulent exudate was seen over loops of bowel and some loops showed easily broken adhesions. A distinct perforation was noted in the wall of the sigmoid colon. The stomach, duodenum and appendix were not remarkable. When the organs were examined grossly, some dependent congestion and emphysema were noted in each lung. The heart weighed 500 Gm. with left ventricular hypertrophy to 2 cm. in thickness. The aortic cusps were thickened, rolled, and some fusion at the commissures was noted, but the aortic ring was not dilated. The cusps did not meet when the valve was viewed from above. Only minimal coronary sclerosis was noted, and there was fusiform dilatation of the thoracic aorta. The coronary ostia were not remarkable. The liver was not enlarged, but showed a 3 by 4 cm. abscess in the left lobe which contained necrotic and purulent material. The pan-

creas was grossly normal, as were the kidneys. The prostate was firm and quite gritty when cut. The colon showed 10 circumferential areas of ulceration scattered at 6 to 8 inch intervals. These had edematous, red, rolled edges and blackish-brown bases. Several penetrated deeply into the wall, but there was only one area of perforation.

Microscopically, the heart showed some interstitial fibrosis and hypertrophy. The aorta had the expected focal areas of elastic tissue destruction. There were also areas of round cell accumulation within the wall, but cuffing about the vasa vasorum was not obvious. The liver abscess was filled with necrotic debris and numerous amebae. Peri-pancreatic scarring and round cell infiltration was marked, but there were numerous islets. The prostate section showed a small focus of adenocarcinoma. The colon sections revealed superficial and deep ulcers teeming with amebae. Undermining was not prominent and round cell infiltration, scarring and edema were seen around the ulcers. Figure 1 shows a cross



FIG. 1. Vertical section through the sigmoid ulcer showing the perforation.

section through the ulcer with the perforation. The tract is filled by necrotic debris and amebae which are easily seen in figure 2. It shows numerous round trophozoites with single nuclei and somewhat granular cytoplasm. Some of these include phagocytized red blood cells.

#### Final Anatomic Diagnoses

- (1) Amebic colitis with perforation of sigmoid colon and peritonitis.
- (2) Amebic abscess, left lobe of liver.
- (3) Luetic aortitis with aortic insufficiency.

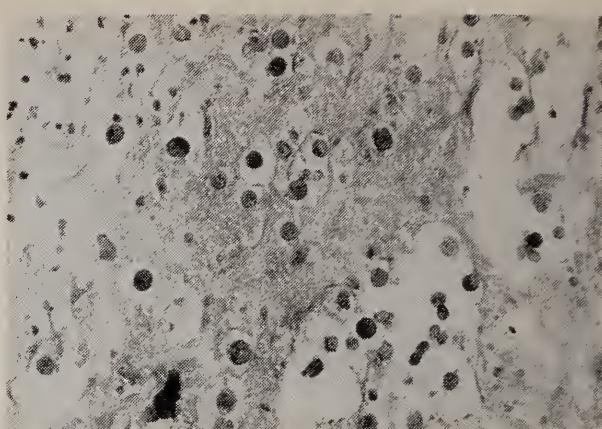


FIG. 2. High power photomicrograph of the perforation tract showing numerous amebas.

- (4) Cardiachypertrophy and fibrosis.
- (5) Adenocarcinoma of the prostate.
- (6) Diabetes mellitus (clinical history of).

I enjoyed Dr. Cummins' excellent discussion very much, including the references to amebiasis. I might mention that Cecil<sup>1</sup> still retains the comment that eosinophilia is not seen in amebic colitis, although Dr. Cummins has just presented evidence to the contrary.

Approximately 10% of the population, as you may know, has been said to harbor amebae, of which only a small fraction become clinically symptomatic. I might say a word about the pathogenesis. The organisms are transmitted by ingestion of the encysted form which is passed in the feces. The fecal—oral route is completed by various types of contamination. The cysts survive the acid environment of the stomach, then release metatrophozooites in the upper small bowel. These break loose to attach themselves to the colon mucosa, particularly in the cecal area. At this point either increased virulence or reduced host resistance come into play to bring about symptomatic or overt disease. Studies have shown that for the amebae to invade the tissues, certain bacteria are necessary. These bacteria provide some necessary substance which makes tissue invasion possible. Thus, depending on host resistance, virulence of the organism and presence of certain bacteria, we can have no invasion, subclinical infestation or symptomatic disease. Trophozooites secrete enzymes which digest the tissues and hyaluronidase which facilitates

invasion. In this way, ulcers are formed. In the typical ulcer the tougher muscularis mucosa has caused lateral burrowing with formation of "bottled ulcers." Rarely, deeper penetration through the wall results in perforation. Organisms frequently invade veins and are carried to the liver, and in occasional cases, various other parts of the body, including skin. Liver abscess is seen in 40 to 50% of cases where the organisms are harbored. So in this case, then, we have amebic colitis with one of the unusual complications, that is perforation and peritonitis.

STUDENT: Where were the lesions?

DR. MILLER: The lesions were scattered the length of the colon, sparing the rectum. They were seen in the cecum, transverse colon and in the sigmoid and they were 8 to 10 inches apart. These were large ulcers, described as circumferential, and 10 in number.

STUDENT: Were stool examinations done?

DR. MILLER: No, the initial set of orders states, "ova and parasites x 3" and these studies were not done. One examination of a swab taken during proctoscopy was negative. I might add that proctoscopy with swab examinations of suspicious areas is usually not helpful. With typical ulcers and sampling of the ulcer base, it may be diagnostic.

DR. LUTON: Was there, perhaps, another perforation in the cecum?

DR. MILLER: No perforation was seen in the cecum. It is possible another perforation had occurred and sealed.

DR. DIETRICH: Your description of the aortic valve sounded more like rheumatic disease than syphilitic involvement.

DR. MILLER: There are certain points in the gross description against syphilitic aortitis and some for it. The commissures were not widened as we would expect. They were slightly fused, but the edges were rolled, and this caused an insufficiency when the valve was viewed from above. Observation without filling of the valve is not a true test, but he definitely had an insufficiency. The valve ring was not dilated; it was only 7 cm. in diameter. The fusiform dilatation of the ascending aorta is more indicative of syphilitic involvement. Microscopically, also, this is syphilitic aortitis.

STUDENT: What about the valve cusps?

DR. MILLER: There was no calcification and no stiffening. The edges were rolled and thickened.

DR. GOMPERTZ: I think follow-up of key tests such as stool examinations is very important. In this case, diagnosis would have been possible clinically. Was the distention of the abdomen terminal?

DR. MILLER: No. He was distended several days prior to demise and this was commented upon several times. A "wet-reading" of the film showing free air the day before death similarly announced a much more serious turn of events.

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1. Cecil—Loeb, Textbook of Medicine, 11th Edition, W. B. Saunders, Co., 1963, Pg. 379.

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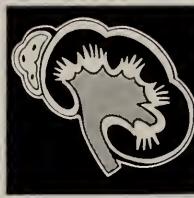
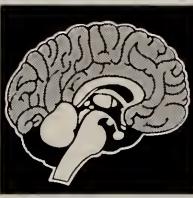
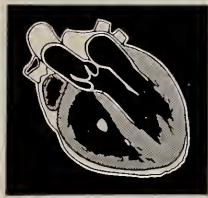
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# *Behind continued high blood pressure readings lies the possibility of organic damage*

1-13

MANY OF THE aspects of essential hypertension are unpredictable—either because there are a number of mechanisms involved or because individuals differ in their responses to these mechanisms.<sup>1</sup>

There is one aspect of hypertension, however, that seems, in many cases, predictable. "... when the blood pressure is elevated to a marked degree for an adequate period of time, this in itself leads to perpetuation of the syndrome with resulting vascular damage throughout the body."<sup>14</sup> All too often the disease progresses until there is damage to one of three vital organs: the heart, the kidney, the brain.



"Hypertension is certainly a major factor in the genesis of coronary heart disease, and it is even more important when compounded with obesity."<sup>4</sup>

"[Vascular deterioration] can be clearly seen in the kidney with a degree of damage that can be measured by renal function studies."<sup>10</sup>

"... most evidence suggests that reduction of blood pressure, when it is too high, not only relieves the heart of excess work but reduces vascular damage."<sup>1</sup>

"In short, treatment is indicated."<sup>1</sup>

Antihypertensive therapy will not restore the blood vessels to normal. Yet many of the vascular changes and symptoms caused by increased blood pressure may be arrested or alleviated when the blood pressure is reduced to normotensive levels.<sup>7</sup>

Reducing the blood pressure helps curtail further vascular damage and improves the prognosis — when damage is not too far advanced before therapy is started.<sup>14</sup> Essential hypertension is an indication not only for treatment, but for early and adequate treatment of the patient in question.

#### **Reduce the blood pressure with Rautrax-N**

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so that smaller doses of both are possible.

Rauwolfa combined with bendroflumethiazide is particularly effective in long-term therapy,<sup>15-17</sup> since beneficial effects do not diminish with continuous daily administration.

For most patients 1 or 2 Rautrax-N tablets daily are sufficient for maintenance therapy. The simplicity, convenience and economy of such a dosage schedule are of particular benefit to older patients.

**References:** 1. Page, I. H., and Dustan, H. P.: The Usefulness of Drugs in the Treatment of Hypertension, in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 95. 2. Hollander, W.: The Evaluation of Antihypertensive Therapy of Essential Hypertension in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 97. 3. Nickerson, M.: Antihypertensive Agents and the Drug Therapy of Hypertension, in Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 3, New York, The Macmillan Co., 1965, p. 727. 4. Berkson, D. M.: Indust. Med. & Surg. 32:371, 1963. 5. Cohen, B. M.: M. Times 91:645, 1963. 6. Lee, R. E., et al.: Am. J. Cardiol. 11:738, 1963. 7. Moyer, J. H.: Am. J. Cardiol. 9:821, 1962. 8. Moser, M.: New York J. Med. 62:1177, 1962. 9. Wood, J. E., and Battey, L. L.: Am. J. Cardiol. 9:675, 1962. 10. Moyer, J. H., and Heider, C.: Am. J. Cardiol. 9:920, 1962. 11. Moser, M., and Macaulay, A. I.: New York State J. Med. 60:2679, 1960. 12. Judson, W. E.: Nebraska M. J. 44:305, 1959. 13. Hodge, J. V.; McQueen, E. G., and Smirk, H.: Brit. M. J. 1:5218, 1961. 14. Moyer, J. H., and Brest, A. N.: Hypertension Recent Advances, Philadelphia, Lea & Febiger, 1961, p. 633. 15. Berry, R. L., and Bray, H. P.: J. Am. Geriatrics Soc. 10:516, 1962. 16. Reid, W. J.: J. Am. Geriatrics Soc. 13:365, 1965. 17. Feldman, L. H.: North Carolina M. J. 23:248, 1962.

**Contraindications:** Severe renal impairment or previous hypersensitivity. **Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting or G.I. bleeding occur.

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# IMEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### REPORT ON ACTIONS OF THE AMA HOUSE OF DELEGATES

#### AMA House of Delegates Acts on Major Issues

● Federal health legislation, physician's billing procedures, medical ethics, racial discrimination, health manpower and an increase in AMA annual dues were among the major subjects acted upon by the House of Delegates by the American Medical Association in Chicago, June 26-30.

#### Federal Health Legislation

● The House considered a large number of resolutions dealing with Medicare, particularly Title XIX of P.L. 89-97. The House recommended that "The Association give wide dissemination to the information contained in a Board Report, particularly in its formal discussion of direct billing, the basic purposes of utilization review, the rejection of compensation for service on such committees except in exceptional circumstances, and the proper placement of any onus of responsibility for any failure in the Medicare program."

#### Direct Billing

● The House strongly supported the general concept of direct billing under Medicare and of individual responsibility. It endorsed a report from the Council on Medical Service which included the following statement:

"Since the Council believes that the current interest in the doctrine of individual responsibility stems in large part from concern over the matter of assignment under P.L. 89-97, it hastens to add that, as a matter of AMA policy, the Council on Medical Service recommends reaffirmation of the responsibility of individual physicians for determining how they will govern their professional practices under this law and that physicians should be made acutely aware of the manifest superiorities of direct billing as previously communicated in a Report of the Council covering recommendations on the physician's role in Medicare." The House recommended the widest possible dissemination of this information. (See Item elsewhere in the yellow pages on advantages and disadvantages of direct billing.)

#### Physician's Billing Procedures

● The American Medical Association already is on record of opposing any program of dictation, interference, or coercion whether direct or indirect, affecting the freedom of choice of the physician to determine for himself the extent and manner of participation or financial arrangement under which he shall provide medical care to patients under Public Law 89-97. In considering a resolution on the right to bill patients under Title XIX of the Law, the House passed an amendment pointing out that direct billing has been recommended as the billing method choice under Title XVIII by the Board of Trustees and the Council on Medical Service. It states that since there is a wide latitude available to the states in establishing administrative procedures under Title XIX, each state medical association should work early and diligently in its own state so that any plan or law adopted in its state for approval under Title XIX would include authorization for direct billing.

## Hospital-Based Physicians

- The House took action involving reimbursement principles affecting hospital-based specialists but also of significance to all physicians. The action stated:

"The principles of medical ethics declare that a physician shall not dispose of his services to a third party or (lay) organization and Title XIX of Public Law 89-97 recognizes the principle of the separation of professional and hospital costs for services rendered by hospital-based physicians." The action stated that since separate billing by the physician for his professional services is a preferred ethical practice, it shall be deemed unethical for a physician to displace a hospital-based physician who is attempting to practice separate billing when said displacement is primarily designed to circumvent separate billing.

## AMA Dues Increase

- By a vote of 168 to 46 the House approved an increase in AMA annual dues from \$45 to \$70 per year, effective January 1, 1967, thus confirming a Board of Trustees recommendation which was given initial approval at the 1965 Clinical Convention. In taking this action, the House pointed out that the programs necessary to serve the needs of the members of the Association cannot be conducted effectively without adequate financing through the dues increase.

## Other Actions

- In considering 108 resolutions, 38 board reports and at least 20 additional reports from councils, the House also:
  - (1) Reaffirmed its opposition to the compulsory assessment of hospital staff members in order to raise funds for hospital construction;
  - (2) Reconsidered its action in defining usual, customary and reasonable fees and referred the matter back to the Council on Medical Service for further study;
  - (3) Strongly endorsed the AMA volunteer physicians for Viet Nam program and urged the entire profession to support it by word and deed;
  - (4) Adopted a resolution urging State Medical Associations to oppose, as detrimental to the public interest, any proposed legislation that would authorize optometrists to engage in the diagnosis or treatment of disease or injury of the eye.
- (5) Dr. Milford O. Rouse, Dallas, Speaker of the House for the past three years, was named AMA President-Elect by acclamation. Registration for the convention reached 35,506, made up of 12,445 physicians and 23,061 guests.

\* \* \* \* \*

## TMA Council Actions

- The Council of the Tennessee Medical Association met in Nashville on July 1, to further study the issue of separate billing and ending corporate practice in Tennessee as directed by the House of Delegates.

Dr. Baker Hubbard, reported to the Council of pertinent actions on the subject as well as ethical matters acted upon by the AMA's House of Delegates. The Council heard a report also from the President of the Tennessee Radiological Society. The Council unanimously adopted the following motion pertaining to corporate practice:

- (1) The Council of the Tennessee Medical Association reaffirms its stand on the ethics of corporate practice and the need to bring to an end such practice in the State of Tennessee, as directed by the House of Delegates of TMA.
- (2) The Council hereby directs hospital-based specialists to proceed forthwith in negotiations with hospitals to bring to an end their participation in corporate practice of medicine.
- (3) All hospital-based specialists be directed to report to their Councilor in his respective councilor district, quarterly, of the status or negotiations with the hospital in which he works.

# Public Service

THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

**Under Medicare:  
Direct Billing  
vs  
Assignments**

- At the recent AMA meeting in Chicago, a multitude of reports and resolutions were directed towards individual responsibility of physicians under P. L. 89-97, Medicare. A great deal was read and said on the question of direct billing of medicare patients versus taking an "assignment". The Council on Medical Service of the AMA gave an excellent report which was adopted by the House of Delegates on this subject. The following portion of the report under Billing Procedures will be of considerable value to physicians in determining which method of payment to choose.

"The Council points out that the physician is legally entitled to set his own valuation upon his service, to bill his patient for services directly, and to conduct himself in this respect essentially as though the medicare program did not exist. The Council is persuaded that this approach will be the least productive of misunderstandings with patients, the least demanding on the time of the physician and his office assistants, and the least disturbing to normal physician-patient relationships. If the direct billing approach is used, the physician will not be involved in the multitude of complexities involved in "assignments" — all of which may be properly identified as matters of concern between the beneficiary and the program carriers and fiscal intermediaries. Specifically, by using direct billing the doctor will not need to concern himself with:

- a. The eligibility status of the patient and extent of coverage;
- b. A distinction between "covered" and "excluded" services;
- c. The status of the Part "B" deductible;
- d. The application of the \$20 outpatient diagnostic service; deductible (Part "A") as a credit toward the \$50 Part "B" deductible;
- e. The application of the "three month carry over" provisions from a previous calendar year to the Part "B" deductible;
- f. The 20% co-insurance provisions with the inevitable need for double-billing when assignments are accepted;
- g. The technical problem of calculating the 20% co-insurance factor prior to notification of the fee determined by carrier as "reasonable";
- h. The relation of what the physician feels his service is worth as opposed to what the carrier defines as a "reasonable" charge;
- i. The presence or absence of supplementary or complementary coverage;
- j. Limitations of payment for outpatient services for psychiatric conditions; and services for psychiatric conditions;
- k. The use of prescribed forms;
- l. Direct billing does not require the listing of a diagnosis on the received bill.

"It is to be noted that the patient will be dependent upon the cooperation of the physician to obtain his reimbursement from the medicare program, since he will need to sub-

## **Community Health Week Date Set**

mit a receipted bill which properly identifies the beneficiary, the physician, the date of service, the nature of the service given, the place of service (home office, hospital, etc.) and the charge made.

"The Council suggests that the physician bear in mind these requirements in adopting his personal billheads to this use in case he prefers not to use the "Request for Payment" form which is to be provided for this purpose.

"The over-all conclusion of the Council on Medical Service is that under ordinary circumstances direct billing of patients will prove superior to the acceptance of assignments."

- The Board of Trustees of the AMA has designated the week of October 16-22 as Community Health Week -- 1966.

All state and county medical societies are being urged to develop appropriate programs marking this fourth annual observance of Community Health Week and to encourage other members of the community health team to join with them in planning and carrying out activities.

Primary objectives of this nationwide observance are to stimulate greater public awareness and appreciation of the wealth of health facilities and services which are available at the community level and to stress the health progress and medical advances which have been made locally through the united efforts of all members of the community health team.

A kit of program suggestions and promotion materials will be mailed to each county medical society in Tennessee soon. The Chairman of the TMA Communications and Public Service Committee, Dr. O. Morse Kochtitzky, in noting the AMA announcement of Community Health Week - 1966 said, "It is hoped that the president of each county medical society in Tennessee will appoint a special committee to promote the observance of Community Health Week in their community and that individual physicians will aid this committee in every way possible to call the public's attention to the health progress being made locally."

- The American Medical Association has contracted with the State Department's Agency for International Development (USAID) to administer the volunteer physicians for Vietnam program.

Physicians sent to South Vietnam under the program serve a 6-day tour of duty at one of 16 provincial civilian hospitals. The volunteer receives only his transportation and an expense allowance of 10 dollars a day; otherwise his services are entirely unpaid.

At the hospitals the volunteers will work with teams of military physicians and corpsmen. These teams, assigned to USAID for service in provincial civilian hospitals, provide continuity in the volunteer program.

Twenty-four to 32 physicians are needed every month to keep hospital staffs at full strength. Most needed are general practitioners, internists, general surgeons and orthopedic surgeons. Small numbers of specialists in the fields of chest diseases, ophthalmology, otolaryngology, radiology and psychiatry are needed from time to time. Other specialists cannot be used at present but inquiries are invited in anticipation of future demands. Because of conditions in Vietnam, only male physicians are accepted. Non-physicians are not recruited.

To be accepted as a volunteer the physician must be in good health and not more than 55 years old. No dependents may accompany the volunteer. Housing is provided in available hotels or apartments and each volunteer is covered, while in Vietnam, by a \$50,000 all-risk insurance policy at no cost.

Information about the program may be obtained by contacting the AMA Physicians for Vietnam, 535 North Dearborn St., Chicago.

## **Physician Volunteers Needed for Vietnam Service**

# TENNESSEE VALLEY MEDICAL ASSEMBLY

(Sponsored by the Chattanooga and Hamilton County Medical Society, Inc.)

TIVOLI THEATER, CHATTANOOGA, TENNESSEE

Monday, September 26, and Tuesday, September 27, 1966

## 14TH ANNUAL ASSEMBLY

- |                  |   |                  |   |
|------------------|---|------------------|---|
| 7:30             | REGISTRATION BEGINS—MONDAY, SEPTEMBER 26, 1966  | 7:30             | REGISTRATION—TUESDAY, SEPTEMBER 27, 1966  |
| 9:00             | JAMES Z. APPEL, M.D., Past President, AMA, Chicago, Ill., "Medicare, Titles XVIII and XIX Today"  | 9:00             | RICHARD H. OVERHOLT, M.D., Dir., Overholt Thoracic Clinic, Boston, Mass., "The Challenge of Pulmonary Cancer Today"   |
| 9:30             | BENTLEY P. COLCOCK, M.D., Surg. Staff, Lahey Clinic, Boston, Mass., "The Complications of Gallstones"   | 9:30             | BURTIS B. BREESE, M.D., Clin. Prof. of Pediatrics, Univ. of Rochester, Rochester, Minn., "The Diagnosis and Treatment of Streptococcal Infection in Children" |
| 10:00-10:30 A.M. | INTERMISSION—REVIEW OF EXHIBITS   | 10:00-10:30 A.M. | —INTERMISSION—REVIEW OF EXHIBITS  |
| 10:30            | ERIC E. WOLLAEGER, M.D., Head of Sect. in Medicine, Mayo Clinic, Rochester, Minn., "The Diagnosis of Diseases Causing Malabsorption"                | 10:30            | CHARLES J. FRANKEL, M.D., Assoc. Prof., Orthopedic Surg., Univ. of Va. Hospital, Charlottesville, Va., "Doctors and the Law"                                  |
| 11:00            | VERNELLE FOX, M.D., Medical Dir., Georgian Clinic, Atlanta, Ga., "The Physician's Role in the Alcoholic's Recovery"                                 | 11:00            | JAMES F. GLENN, M.D., Prof. and Chief, Div. of Urologic Surg., Duke Univ., Durham, N. C., "Vesicoureteral Reflux in Children"                                 |
| 11:30            | JOSEPH A. FREIBERG, M.D., Prof. of Surg., Dir. Orthopaedic Div., Univ. of Cincinnati, Cincinnati, Ohio, "The Painful Foot, Diagnosis and Treatment" | 11:30            | NOBEL O. FOWLER, M.D., Prof. of Medicine, Univ. of Cincinnati, Cincinnati, Ohio, "Problems in the Diagnosis and Treatment of Pulmonary Embolism"              |

### NOON

LUNCHEON SYMPOSIA—Sept. 26, 1966 \$4.00  
(Limited to 85 physicians per symposium)  
(Tickets must be obtained prior to assembly)

#### UPPER GASTROINTESTINAL BLEEDING

Guest Panelists: ROBERT J. COFFEY, M.D., BENTLEY P. COLCOCK, M.D., JAMES D. HARDY, M.D., W. GORDON WALKER, M.D., and ERIC E. WOLLAEGER, M.D.

- |      |   |
|------|---|
| 2:00 | JOE M. BLUMBERG, Brig. Gen., MC, USA; Dir. Armed Forces Inst. of Path., Washington, D. C., "The Role of the Pathologist in Aviation Accidents"  |
| 2:30 | THOMAS P. HAYNIE, M.D., Asst. Prof. of Medicine, Univ. of Texas M. D. Anderson Hospital and Tumor Institute, Houston, Texas, "Visualization of Organs and Tumors With Radioactive Isotopes" |

#### 3:00-3:30 P.M. INTERMISSION—REVIEW OF EXHIBITS

- |      |  |
|------|--|
| 3:30 | JAMES A. JOHNSON, JR., M.D., Dept. of Psychiatry, Emory Univ. Clinic, Atlanta, Ga., "Group Behavior and Group Therapy"   |
| 4:00 | W. GORDON WALKER, M.D., Assoc. Prof. of Medicine, Johns Hopkins, Baltimore, Maryland, "Diuretic Therapy and Its Complications"   |
| 4:30 | ROBERT J. COFFEY, M.D., Prof. of Surg., Chairman Dept. of Surg., Georgetown Univ. School of Medicine, Washington, D. C., "Experiences in the Diagnosis and Treatment of Hyperparathyroidism" |

### NOON

LUNCHEON SYMPOSIA—Sept. 27, 1966 \$4.00  
(Limited to 85 physicians per symposium)  
(Tickets must be obtained prior to assembly)

#### RECENT DEVELOPMENTS IN CANCER THERAPY

Guest Panelists: THOMAS P. HAYNIE, M.D., CHARLES J. FRANKEL, M.D., JAMES F. GLENN, M.D., ROBERT D. SULLIVAN, M.D., and WILLIAM H. MORETZ, M.D.

- |      |   |
|------|---|
| 2:00 | JAMES D. HARDY, M.D., Prof. of Surg., Chairman of Dept., Univ. of Miss., Jackson, Miss., "Problems Associated With Gastric Surgery"                                   |
| 2:30 | HOWARD W. JONES, JR., M.D., Assoc. Prof., Obstetric and Gynecology, Johns Hopkins School of Medicine, Baltimore, Md., "Diagnosis and Treatment of Primary Amenorrhea" |

#### 3:00-3:30 P.M.—INTERMISSION—REVIEW OF EXHIBITS

- |      |   |
|------|---|
| 3:30 | ROBERT D. SULLIVAN, M.D., Dir., Dept. of Cancer Research, Lahey Clinic Fdn., Boston, Mass., "Current Status of Cancer Chemotherapy"             |
| 4:00 | WILLIAM H. MORETZ, M.D., Chairman, Dept. of Surg., Medical College of Ga., Augusta, Ga., "Problems in Management of Occlusive Arterial Disease" |

Make check payable to Tennessee Valley Medical Assembly. (Tickets will be mailed to you or held at Registration Desk only if check is enclosed.)

## *In Diverticulitis...*

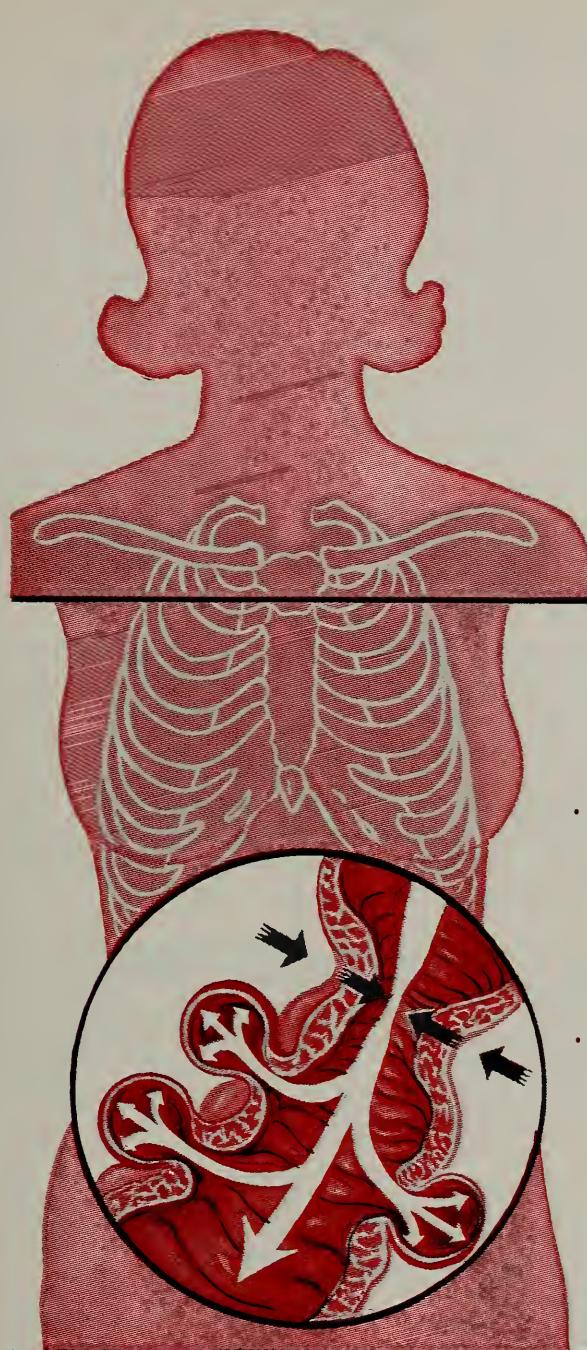
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... to protect the mucosal surface against physical irritants.

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SEARLE

*Research in the Service of Medicine*

# President's Page



DR. HUBBARD

Physician members of this Association should be aware of the implications of Title XIX of the Medicare Law, which will be put into effect gradually until all present health-welfare programs sponsored by the State come under this Law. Representatives of your State Association are working closely with the Governor, insurance carriers, consultants and state government officials in this program. Following are some of the important policy issues in which you should be interested.

It is of foremost importance that in such a proposed program, the traditional physician-patient relationship should not be interfered with and of providing the patient with a free choice of physician and facility. The physician must be allowed to financially deal

directly with the patient and to be reimbursed for his services. TMA recommends that payments be identical with the present method of handling of Title XVIII of the Medicare Act, in order to give the patient and the physician the greatest individual responsibility. TMA representatives are urging that the State of Tennessee include in any proposed program that the principle and method of billing be the prerogative of the physician.

Specific recommendations being made to the State are:

(1) TMA favors the full implementation of Title XIX in so far as the State is fiscally able. The speed of accomplishment should be no greater than the State of Tennessee can afford in moving forward and still be fiscally responsible to maintain the program. There should be available funds in order that the physician and all vendors of services will be paid on a usual and customary basis.

(2) TMA urges the placement of the administration of this medical assistance program under the Department of Public Health in preference to the Department of Public Welfare. This will be a health program and should be administered by the Health Department under the direct supervision of a physician and/or physicians. It is not sufficient to have only a physician adviser.

(3) To facilitate the administration of Title XIX as it develops and in allowing for the most simple mechanism for payment to those groups who provide services under the act, it is urged that the State of Tennessee determine that only one fiscal carrier will be charged with this responsibility, and that this be the same carrier as the one performing a similar function under Title XVIII of Public Law 89-97. This will simplify administrative problems. Use of two or more fiscal carriers will only compound and confuse an already complex situation. We as physicians, can visualize all manner of difficulty in dealing with more than one carrier for the State.

The present carrier for Title XVIII is the Equitable Life Assurance Society of the U.S. and it is felt that this company can perform the service for both Title XVIII and Title XIX in an efficient, economical and proficient manner. The Governmental Medical Services Committee of TMA urges that consideration be given only to *private* insurance carriers.

(4) The Tennessee Medical Association has already taken steps to organize in all of our county medical societies, Claims Review Committees which will help in the review of problems which may arise as they pertain to fee claims under Title XIX. Steps have been taken to urge all hospital staffs to establish functioning Utilization Committees.

May I emphasize the importance of your being knowledgeable about Title XIX. Your TMA officers and the Committee on Governmental Medical Services is diligently studying, advising and communicating with those departments of the state government, and other consultants in making clear the position of the Tennessee Medical Association in the Title XIX program.

President

# THE JOURNAL

OF THE  
TENNESSEE MEDICAL ASSOCIATION

Published Monthly

Devoted to the Interests of the Medical Profession of Tennessee  
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37203

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Address organizational matters to Jack E. Ballentine, Executive Director, 112 Louise Avenue, Nashville 5, Tenn.

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AUGUST, 1966

# EDITORIAL

## COVERAGE BY VOLUNTARY INSURANCE IS URGED

The medical profession was urged "to encourage the public to secure coverage rather than to rely upon PL 89-97," in a report on voluntary insurance adopted by the AMA House of Delegates at the Annual Meeting. The House instructed the Council on Medical Service to "continue to encourage the expansion and development of voluntary coverage for persons of all ages," and "to provide reports of these developments—at appropriate intervals."

The Council reported that many insurance carriers were modifying their policies as of July 1, 1966. Eighty-nine companies writing 87% of group health insurance will continue to make coverage available for groups. Ninety-two of the companies writing 46% of individual coverage will make such insurance available. Seventy-two of the 74 Blue Shield Plans will have programs to supplement Medicare benefits.

This stand by the House of Delegates and

the Council on Medical Service shows great wisdom and foresight. It would be most unfortunate to see the strengths of voluntary health insurance go "down the drain." Its strengths may be needed by our people if Medicare does not fulfill all their fond expectations.

A week before the AMA Meeting, by a strange quirk of circumstance, there appeared a lengthy article in *Barron's National Business and Financial Weekly*, by Neil McInnes, the paper's European correspondent (June 20, 1966). The article's title—"Cradle to the Grave?—The British are Turning Away From Socialized Medicine."

"London—By a curious coincidence, on July 1 the U. S. will take its first step toward socialized medicine and Britain will take its biggest step away from it. On the same day medicare goes into effect for senior American citizens, all British subjects, old or young, will be offered a paying alternative to the free National Health Service. A company called Independent Medical Services, Ltd., will seek to sell Britons for cash what they have been getting free from the welfare state for nearly two decades. In this apparently quixotic undertaking it enjoys the backing of the British Medical Association, of which, the vast majority of this country's doctors are members.

"Executives of Independent Medical Services recently told Barron's that public opinion surveys showed 30% to 40% of Her Majesty's subjects are not satisfied with free cradle-to-grave state medicine. They would prefer to make private arrangements with a family doctor. The firm, for a moderate charge, will enable them to do just that."

In 1960, on these pages I reviewed the evolution and growth of voluntary health insurance in Great Britain during the first decade of its National Health Service.<sup>1</sup> This review showed that Great Britain had only a very embryonic program of voluntary health insurance (in the American sense) before the inception of the Health Service in 1948, but that it was developing into a robust youngster in spite of "free" medical care.

The report in Barron's describes the birth of *Independent Medical Services, Ltd.*, which has entered into competition with the National Health Service. Already, it is said, over 2 million Britons are covered by private health insurance paid for individually or by employers. The *British United Provident Association (BUPA)*, organized

1. Editorial: Growth of Voluntary Health Insurance in Great Britain. J. Tennessee M. A. 58:399, 1960.



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by the late Lord Nuffield is signing up 75,000 subscribers annually, and Hospital Services Plan of Tunbridge Wells and Western Provident of Bristol are acquiring 28,000 subscribers annually between them.\* The selling has been by word of mouth, but now these companies plan to enter upon an advertising campaign.

The following paragraphs from the Barron's article are of interest.

"Why are so many of Her Majesty's subjects willing to pay for medical care substantial sums in addition to those they have already paid, in taxes and in National Health stamps, for 'free' care? Not only the rich are doing so. Those who are deserting state medicine are middle-class Britons and quite a few workers who cannot afford catastrophic medical bills, but are not content with socialized medicare.

"Their complaints are precise. First, the average National Health doctor has 2,300 people on his list, . . . It means long, frustrating (and, for some, costly) hours in waiting rooms. Consultations often are so hasty that, rightly or wrongly, patients feel they are perfunctory. If a specialist is needed, the patient has no say in who will be consulted, nor where, nor when.

"If the specialist is a surgeon and he recommends an operation, there is no guarantee that he will perform it himself. The scalpel may be wielded by a surgeon whom the patient has never seen before and may not see very often afterward. In short, many a sufferer gets the feeling he is on a conveyor belt in a very impersonal medical factor. . .

"Finally, there is the vital question of waiting time for hospital accommodations. . . . Because of the strain free treatment has placed on health resources, only the most urgent cases can be sure of prompt treatment. . .

"A factory hand who develops a hernia might lose overtime for six months because he has to rest while awaiting a hospital bed in his locality. Subscribing to BUPA to be sure of prompt treatment saves him money.

"Since his employer's interests run along parallel lines, BUPA has won the support of many British companies. Some 70 leading insurance firms, presumably good judges of medical underwriting have covered their executives. Another 6,400 corporations or institutions have taken out group policies on their staffs, . . ."

To be sure, the National Health Service of Great Britain is very different from Medicare and the end results may be as different. However, the basic philosophy is the same. Thus, there is little to be gained by discussing these words of the European

correspondent Neil McInnes. Nevertheless, they are thought-provoking at this particular moment in our Nation's history.

One can only reiterate that the stand by the House of Delegates to support voluntary health insurance and to urge its expansion is wise in borrowing for the future.

Though I have quoted over-extensively, I cannot resist citing the last paragraph of Barron's article:—

"While eschewing politics, *Independent Medical Services, Ltd.*, recently took a fling at philosophy. The introduction to the booklets it is distributing this month to advertise its appearance is not a citation from any Tory manual or Liberal manifesto. Rather, it quotes Abraham Lincoln,—'You cannot build character and courage by taking away men's initiative and independence. You cannot help men permanently by doing for them what they could do for themselves.'"  
(Italics, The Editor)

R. H. K.

## Special Item

*It would seem that the members of the Tennessee Medical Association deserve to know in some detail certain of the actions taken by the AMA House of Delegates at its recent meeting. The reader must be well aware that this meeting was held in the atmosphere of the most far-reaching historic moment of our Nation insofar as the medical care of its citizens is concerned.*

*Government in medicine offers an entirely new face in what has been implemented and what is to come. (The reader is urged to read carefully the "yellow pages" in this issue, as well as in the future for here will appear notes about the certainly ever-changing picture.)—Editor.*

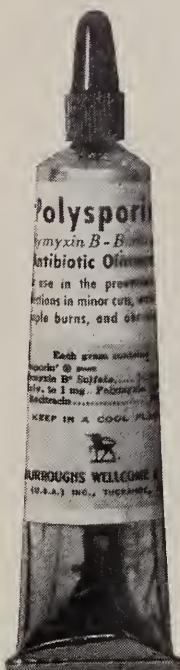
## Report on Actions of the House of Delegates American Medical Association 115th Annual Convention

CHICAGO, June 30—Federal health legislation, physicians' billing procedures, medical ethics, racial discrimination, health manpower and an increase in AMA annual dues were among the major subjects acted upon by the House of Delegates at the American Medical Association's 115th Annual Convention held June 26-30 in Chicago.

Dr. Milford O. Rouse of Dallas, Texas, Speaker of the House of Delegates for the

\*Single persons and heads of families, in a total population of 54 million in England, Scotland, Wales and North Ireland.

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Contact: Medical Director, Highland Hospital, Asheville,  
N.C. 28801

past three years, was named AMA president-elect by acclamation. He will succeed Dr. Charles L. Hudson of Cleveland, Ohio, who took office at the Tuesday afternoon inaugural ceremony during the Chicago convention.

The 1966 AMA Distinguished Service Award was voted to Dr. Warren H. Cole of Chicago, head of the Department of Surgery at the University of Illinois College of Medicine, for his work in cancer research and his many contributions to medical literature.

The Layman's Citation for Distinguished Service was awarded to Danny Thomas, well known entertainer in radio, television, motion pictures and the stage, for his leadership in founding the St. Jude Children's Research Hospital at Memphis, Tennessee.

Final registration reached a total of 35,506, made up of 12,445 physicians and 23,061 guests.

#### Federal Health Legislation

The House of Delegates received and considered a large number of reports and resolutions dealing with Medicare, the expanded Kerr-Mills program under Title 19 of Public Law 89-97 and other federal laws or programs.

In accepting and commending a Board of Trustees report on Medicare, the House recommended that

"the Association give wide dissemination to the information contained therein, particularly its informed discussion of direct billing, the basic purposes of utilization review, the rejection of compensation for service on such committees except in exceptional circumstances, and the proper placement of any onus of responsibility for any failure in the Medicare program."

The Board report ended with the following conclusion:

"During the past year many individuals have represented the American Medical Association and the physicians of the United States by meeting frequently with officials of the Department of Health, Education and Welfare. This degree of cooperation on our part should be viewed as a recognition by responsible citizens of an obligation to obey the law of the land, including this law with which we disagree. Our specific purposes have been to provide expert assistance to the government so that this law could be implemented in a manner most helpful to the beneficiaries while disturbing the practice of medicine to the minimum degree. Despite our best efforts it is

apparent that serious problems are inevitable in connection with the implementation of this law and we trust that the physicians and the public will place the blame for such deficiencies squarely where they belong—on the Federal Government.

"We are proud of the role we have assumed and in many instances our efforts have been productive. Proposed forms were simplified; some unnecessary forms eliminated, and a number of our suggestions was incorporated in regulations and procedures. An informative "Reference Guide" for physicians, recently distributed, was prepared with consultation of AMA staff. Numerous other items will continue to receive our most serious study and consideration, and the Board urges and requests that every member exhibit his personal diligence by supplying his local medical society documented evidence of transgressions of the spirit or the letter of the law as it is implemented.

"The Board of Trustees intends to continue to supply advice, guidance, and dissent when necessary to the Government or to other third parties on matters that pertain to the health of the public and the interests of the medical profession."

The House strongly supported the general concept of individual responsibility and endorsed a report from the Council on Medical Service which included the following statement:

"Since the Council believes that the current interest in the doctrine of individual responsibility stems in large part from concern over the matter of assignments under PL 89-97, it hastens to add that, as a matter of American Medical Association policy, the Council on Medical Service recommends reaffirmation of the responsibility of individual physicians for determining how they will govern their professional practices under this law and that physicians should be made acutely aware of the manifest superiorities of direct billing as previously communicated to this House in the Council's Report E(A-66) on 'Recommendations on the Physician's Role in Medicare.'"

The latter report (Report E) was highly commended, and the House recommended its widest possible dissemination, including publication in its entirety in a prominent place in the earliest possible issue of *AMA News*.

#### Physicians' Billing Procedures

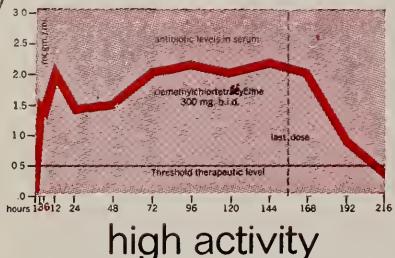
In connection with the Medicare part of Public Law 89-97, the House also adopted three resolutions which recommended that physicians use the direct billing method rather than the assignment procedure. At the same time, the House pointed out that adoption of these resolutions should not be interpreted as contravening the statement



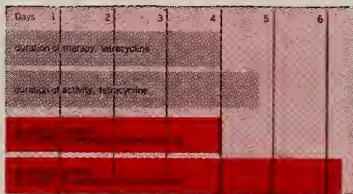
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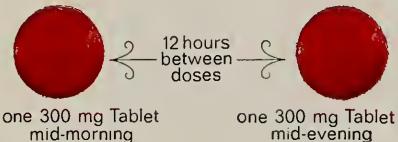


From Sweeney, W. M., Dornbusch, A. C., and Hardy, S. M.,  
Amer. J. Med. Sci. 243:296 (Mar.) 1962.



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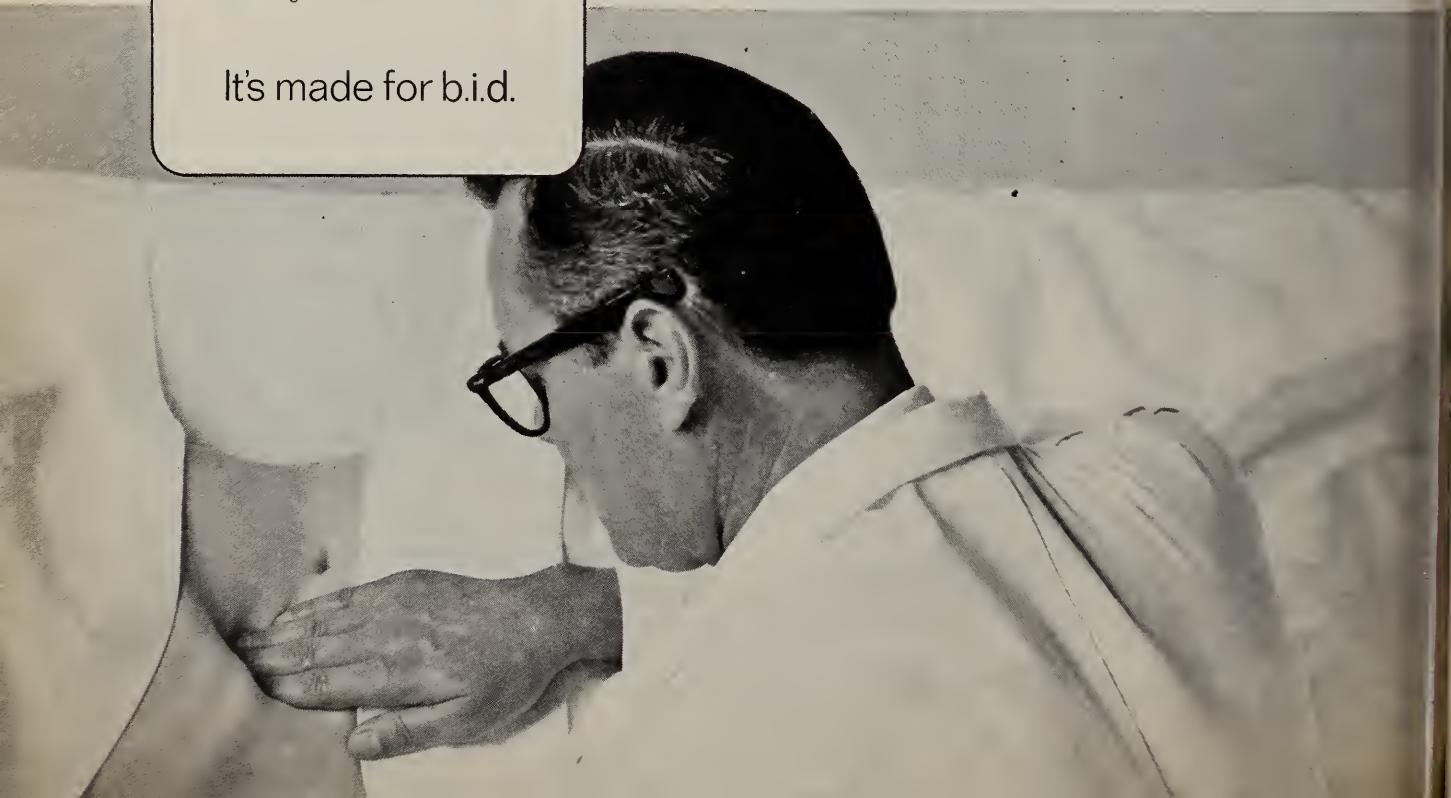
**Contraindication**—History of hypersensitivity to demethylchlortetracycline.

**Warning**—In renal impairment, usual doses may lead to excessive systemic accumulation and liver toxicity. Under such conditions, lower than usual doses are indicated and, if therapy is prolonged, serum level determinations may be advisable. A photodynamic reaction to natural or artificial sunlight has been observed. Small amounts of drug and short exposure may produce an exaggerated sunburn reaction which may range from erythema to severe skin manifestations. In a smaller proportion, photoallergic reactions have been reported. Patients should avoid direct exposure to sunlight and discontinue drug at the first evidence of skin discomfort.

**Precautions and Side Effects**—Overgrowth of nonsusceptible organisms may occur. Constant observation is essential. If new infections appear, appropriate measures should be taken. Use of demethylchlortetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect occurs mostly during long-term use but has also been observed in short treatment courses. In infants, increased intracranial pressure with bulging fontanelles has been observed. All signs and symptoms have disappeared rapidly upon cessation of treatment. Side reactions include glossitis, stomatitis, proctitis, nausea, diarrhea, vaginitis and dermatitis. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Anaphylactoid reactions have been reported.

**Average Adult Daily Dosage:** 150 mg q.i.d. or 300 mg b.i.d. Should be given 1 hour before or 2 hours after meals, since absorption is impaired by the concomitant administration of high calcium content drugs, foods and some dairy products.

**Capsules:** 150 mg; **Tablets:** film coated, 300 mg, 150 mg, and 75 mg of demethylchlortetracycline HCl.



approved at the Special Session in October, 1965, which said:

"The American Medical Association opposes any program of dictation, interference or coercion, whether direct or indirect, affecting the freedom of choice of the physician to determine for himself the extent and manner of participation or financial arrangement under which he shall provide medical care to patients under Public Law 89-97."

In considering a resolution on the right to bill patients under Title XIX of the law, the House passed an amendment pointing out that direct billing has been recommended as the billing method of choice under Title XVIII by the Board of Trustees and the Council on Medical Service. It then said that since there is a wide latitude available to the states in establishing administrative procedures under Title XIX, each state medical association should work early and diligently in its own state so that any plan or law adopted in its state for approval under Title XIX would include authorization for direct billing.

The House also instructed the AMA Advisory Committee to the Department of Health, Education and Welfare to do all in its power to implement the intent of the resolution at the national level. In addition, the House urged positive steps to obtain statutory authority for a continuing medical advisory committee under Title XIX, and it called on the AMA and the state societies to maintain added vigilance to eliminate any patterns which might subvert the intent of Title XIX.

### Hospital-Based Physicians

The House passed two resolutions involving billing and reimbursement principles affecting hospital-based specialists but also of significance to all physicians. The first said:

"The Principles of Medical Ethics declare that a physician shall not dispose of his services to a third party or "lay" organization, and

"Title XVIII of Public Law 89-97 recognizes the principle of the separation of professional and hospital costs for services rendered by hospital-based physicians; and

"This principle has been advocated by the AMA, the American College of Radiology, the American College of Pathologists, and many regional organizations, and

"A great number of hospital-based physicians throughout the nation have declared their intention to bill separately for their professional services in keeping with this principle; therefore be it

"Resolved, That, since separate billing by the physician for his professional services is a preferred ethical practice, it shall be deemed unethical for a physician to displace a hospital-based physician who is attempting to practice separate billing when said displacement is primarily designed to circumvent separate billing."

The second resolution regretted that publication of Medicare Regulations No. 5 was delayed until June 28, three days before the effective date of Medicare, and said that these regulations do not conform to the intent of Congress as expressed in Section 1801 of the Medicare law. It then declared that:

"The House of Delegates instruct the Board of Trustees and the Executive Vice President to request from the Social Security Administration an extension of date of final adoption of the proposed regulations of not less than 90 days, in order that the American Medical Association and all other interested medical organizations be allowed reasonable time to study, and to submit, to the Social Security Administration data, views or arguments and pertinent constructive comments and suggestions.

"To preserve the professional independence of medical practice that the Board of Trustees and Officers of the AMA be instructed to immediately inform the membership that Medicare Reg. No. 5 will not apply to physicians (whether hospital-based or not) who

"1. have no financial relationship with a hospital covering medical services to patients

"2. do not accept assignments but bill directly

"*The AMA News* and other appropriate media be used to advise all physicians who are developing contractual relationships with hospitals for professional service that they should delay the finalization of any agreements pending further analysis of the implementing regulations."

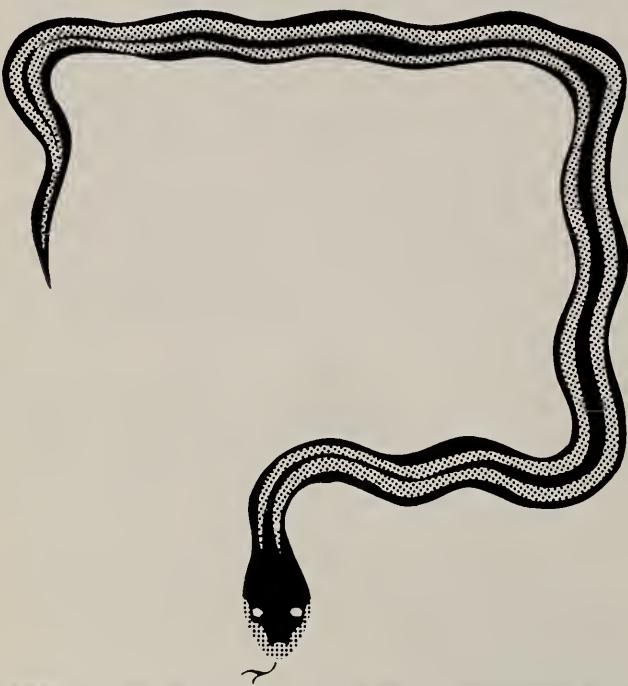
### Medical Ethics

In acting upon a Board of Trustees recommendation that a physician may participate in the ownership of a pharmacy or regularly dispense drugs, remedies or appliances or provide eyeglasses to his patients *only when approved by his component and constituent medical associations and when it is determined by them to be necessary in the best interests of the patient*, the House approved the following reference committee statement:

"The Principles of Medical Ethics provide: 'Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.' Your reference

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects . . . Urinary retention, noted in two cases was eliminated in one by reducing dosage."

## **CHARMS THE HYPERACTIVE COLON**



## **CANTIL®** (mepenzolate bromide)

helps restore normal motility and tone

### **IN BRIEF:**

One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy— withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

**Supplied:** CANTIL (mepenzolate bromide) —25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL —containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

I. Riese, J.A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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committee reaffirms the 1963 House of Delegates interpretation of the words 'in the best interest of the patient,' which reads as follows:

"It is the opinion of the Judicial Council that this language was adopted to permit both the practicing physician and the local medical societies to evaluate the many factual situations incident to prescribing and dispensing which are bound to arise in the practice of medicine. Under this language the doctor is permitted to exercise his own best judgment when caring for his patient. It is known that there will be situations when it is necessary or desirable for a physician to dispense or supply what he has prescribed. The Principles permit this to be done. On the other hand, this broad language provides a means by which a component medical society can inquire into the facts of a particular practice. The profession thus can act to prevent abuse of discretion and protect patients from exploitation. In essence this language means that a physician in the exercise of sound discretion may dispense 'in the best interest of his patient'; it does not authorize him to dispense solely for his convenience or for the purpose of supplementing his income."

"The reference committee approves the goals sought by the Board's report, but disapproves its specific recommendations. It notes that mechanisms presently exist for processing charges of deviation from the foregoing ethic and urges that these mechanisms be made vitally active at local level. When charges of deviation develop, complaints should be made to the local society and vigorously processed by the appropriate committee of that society. If they are not resolved thereby, the complaints should then be carried to the state constituent association. The prudent physician will always seek the guidance of his local medical society in situations relating to ethical conduct."

The House directed the Board of Trustees to take action as expeditiously as possible to give wide dissemination to the reference committee report.

#### Discrimination

The House received six resolutions dealing with the subject of discrimination against some applicants for membership in component medical societies. It called attention to the strong position taken by the House in 1964 but pointed out that it is difficult to follow the 1964 directive because there is now no mechanism at the national level whereby a rejected applicant for membership at county or state level may obtain a hearing in order to right an alleged wrongful discrimination.

In lieu of the six resolutions, the House adopted a substitute resolution which di-

rected the Council on Constitution and By-laws to prepare such changes in the Constitution and Bylaws "as may be necessary to permit the Judicial Council to receive and act upon appeals filed by applicants who allege that they have been unfairly denied membership in a local and/or state society." The House asked the Council to report its recommendations at the 1966 Clinical Convention.

#### Health Manpower

On the subject of health manpower the House received reports from the Board of Trustees, Council on Medical Education and Council on Medical Service and also one resolution. In general, all of them urged the AMA to assume leadership and mobilize its efforts to meet present and future shortages in health manpower. The House approved the Board report, announcing appointment of a Committee on Health Manpower, and adopted the resolution. The two Council reports were referred to the new Board committee.

In taking these actions, the House approved a reference committee statement which included the following:

"Your Reference Committee is well aware of the drastic shortage of health manpower that is confronting the American public. It is keenly appreciative of the opportunity presented to the American Medical Association to furnish leadership in the solution of this problem. The necessary additional manpower in the medical profession and in allied health professions must be developed. The most effective and efficient utilization of existing health manpower must be made at all times. This is no time to surrender leadership to persons or organizations outside of the medical profession."

#### AMA Dues Increase

By a vote of 168 to 46, the House approved an increase in AMA annual dues from \$45 to \$70, effective January 1, 1967, thus confirming a Board of Trustees recommendation which was given initial approval at the 1965 Clinical Convention.

The House, in approving the dues increase, accepted a reference committee statement which said:

"It is quite apparent that the programs necessary to serve the needs of the members of the Association cannot be conducted effectively without adequate financing and it is equally apparent that such adequate financing is impossible with-

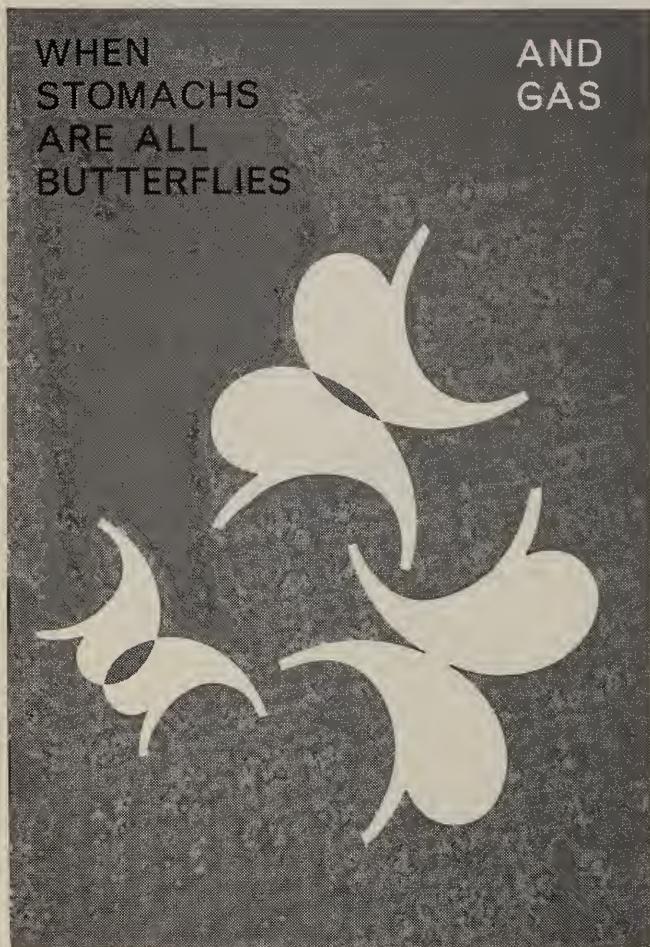
## DACTILASE®

Each tablet contains:

Dactil® (piperidolate hydrochloride), 50 mg.; Standardized cellulolytic\* enzyme, 2 mg.; Standardized amylolytic enzyme, 15 mg.; Standardized proteolytic enzyme, 10 mg.; Pancreatin 3X\*\* (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

\*Need in human nutrition not established.

\*\*As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.



In chronic or acute indigestion, fluttery, gassy stomachs obtain prompt, gratifying relief through the antispasmodic, surface anesthetic and enzymatic activity of Dactilase. Dactilase decreases hypermotility and pain and reduces the production of gas. Dactilase does not induce stasis, but helps restore normal tone. It has little or no effect on enzyme secretions, but adds enzymes, thus contributing to the digestive efficiency of the patient.

**Side Effects and Contraindications:**

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

**Administration and Dosage:** One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

**Supplied:** Bottles of 60 and 250.

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out the dues increase requested by the Board of Trustees. Your Reference Committee reaffirms its confidence in the judgment of the Board of Trustees which has in the past and must in the future exercise the most careful and prudent stewardship over the assets of the Association. The Board of Trustees is the Committee elected by the House of Delegates to investigate and control the finances of the Association. The appointment of any other committee to perform this function would be most inappropriate."

#### Other Actions

In considering 106 resolutions, 38 Board reports and at least 20 additional reports from councils and other groups, the House of Delegates also:

Endorsed the *Declaration of Helsinki*, already adopted by the World Medical Association, as a guide to those who are engaged in clinical medical investigation.

Reaffirmed its opposition to the *compulsory assessment* of hospital staff members in order to raise funds for hospital construction;

Reconsidered its action in defining *usual, customary and reasonable fees* and referred the matter back to the Council on Medical Service for further study;

Urged all state and county medical societies to send representatives to the *Third National Congress on Medical Quackery* to be held October 7-8, 1966, in Chicago;

Commended the *American Medical Association Education and Research Foundation* for its accomplishments during the past four years and gave a standing vote of gratitude to Dr. Raymond M. McKeown, *AMA-ERF* president since 1962;

Strongly endorsed the *AMA Volunteer Physicians for Vietnam* program and urged the entire profession to support it by word and deed; approved a recommendation by the *AMA survey team* and the Board of Trustees that the Association organize and administer a program of American assistance in *medical education in South Vietnam* supported by the U. S. Agency for International Development; was impressed by a report from Dean Pham Bieu Tam of the Faculty of Medicine, *University of Saigon*, and urged that the *AMA* do everything possible to assure that volunteer physicians caring for the South Vietnam civilian population are properly supplied with medicines and other medical supplies;

Adopted a resolution urging constituent medical associations to oppose, as detrimental to the public interest, any proposed legislation that would authorize optometrists to engage in the diagnosis or treatment of disease or injury of the eye;

Approved, with minor editorial revisions, a final report from the Committee on Maternal and Child Care of the Council on Medical Service dealing with the medical care aspects of "*Combating the Problems of Unwed Parents*";

Agreed with a strong policy statement condemning the *abuse of LSD* and other non-narcotic drugs, pointing out that the illicit use of LSD is subverting and vitiating important and necessary valid experimental studies, and recommending that the manufacture and distribution of LSD be continued as needed under strict control, with the drug being made available only to competent research workers (physicians trained in its use) on approval of the Department of Health, Education and Welfare;

Reaffirmed its opposition to the compulsory regulation of any *single method*, such as the use of generic terms, of the *prescribing of drugs*;

Offered *AMA* cooperation, in order to prevent public fear and misunderstanding, to those foundations and other groups which request it in clarifying statistical data, visual media and other forms of medical information to be presented to the public so as to provide an accurate view of the problems or problem with which they are concerned;

Adopted a humorous resolution and an equally humorous reference committee report which requested that "in the future full air-conditioning be considered as a prerequisite in the selection of the headquarters hotel for the annual *AMA Convention* in those cities where the *psychophysiological effects of heat* may interfere with effective delegatemanship";

Received as information a comprehensive report on the *Relation of Medicine and Osteopathy*, which contains much material pertinent to future policy considerations, and also approved in principle a recommendation that doctors of osteopathy be com-

For cold hands and feet, nothing beats hot stoves—but they are awkward to carry around. Now Gerilid, in good-tasting take-along chewable tablets can provide rapid vasodilation of peripheral circulation, bringing real warmth to the extremities and decreasing sensitivity to sudden temperature change. Patients like Gerilid and know they are getting relief.

**WARMTH  
FOR COLD  
HANDS AND FEET**



## **GERILID™**

Each chewable tablet contains:  
nicotinic acid (niacin) 75 mg.  
and aminoacetic acid (glycine) 750 mg.

**Administration and Dosage:** One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

**Side effects:** Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

**Supplied:** Packages of 50 chewable tablets.

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missioned in the Armed Forces Medical Services;

Agreed with a report recommending that the core curriculum plan for continuing medical education be *not* approved in its present form, that no further core curricula be developed at this time, and that various methods of continuing medical education be studied under the auspices of the Council on Postgraduate Programs;

Expressed its opposition to the *Hart bill*, S. 2568, and all similar legislation;

Adopted reports from the Council on Medical Service on a *Model Emergency Department Agreement* and on *Multiple Coverage in Voluntary Health Insurance*;

Approved Board reports on *Exercise and Physical Fitness*, encouraging state and local medical societies to support the promotion of fitness programs, and on *Venereal Disease Control*, emphasizing the continued need for all physicians to report all cases that come to their attention, and

Authorized the Speaker of the House to appoint a *Resolutions Consultation Committee*, purely for editorial advisory purposes, at subsequent AMA conventions.

#### Presidential Addresses

Calling upon the medical profession for strength and unity in resisting the present socialist trend in this country, Dr. James Z. Appel of Lancaster, Pa., retiring AMA president, told the Sunday opening session that physicians "must participate in the ranks of both political parties and have a voice in the determination of party policy and the writing of party platforms."

Dr. Hudson, in his inaugural address Tuesday, declared that "we shall need all of our intellectual and scientific resources to cope with the new economics of medicine" and to prevent the extension of the Medicare program, without demonstrated need, toward a national health service.

Speaking at the final session of the House on Thursday, Dr. Hudson said that "a demonstration of our ability to perform must clearly indicate not only our competency in the field of medicine, but also our ability to react to a new kind of government thrust into health care." He warned that the real threat to our system of medicine is not the details of Medicare implementation but in

the expansion of the principle of social insurance.

Signed

F. J. L. Blasingame, M.D.  
Executive Vice President  
American Medical Association

## DEATHS

**Dr. William Tilson Woodward**, 83, Erwin, died May 29th at Unicoi County Memorial Hospital after two weeks illness.

**Dr. John Franklin Gilbert**, 90, a former resident of Cleveland, died June 17th at his home in Madison, Georgia.

**Dr. Henrietta Veltman**, 79, Paris, died May 28th.

**Dr. John E. Kimball**, 51, president and co-founder of Woman's Hospital and a partner in Kimball-Pallas Clinic, Chattanooga, died June 2nd at his home.

**Dr. F. Tom Mitchell**, Memphis, 76, died July 7th.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

#### Knoxville Academy of Medicine

Mr. Wilburn Smith and Mr. Douglass Richard of the District Office of the Social Security Administration, and a representative from the Equitable Life Assurance Company, presented a discussion on Medicare at the meeting of the Academy on June 14th. The program participants represented the Department of Health, Education and Welfare and the fiscal intermediary in Tennessee for Part B under P. L. 89-97.

The July 12th meeting of the Academy was held at Eastern State Psychiatric Hospital with Dr. Ray Bullard of Topeka, Kansas, as guest speaker. Dr. Bullard's subject was "Doctors and Psychiatrists."

#### Memphis-Shelby County Medical Society

The Society met in regular session in the auditorium of the Institute of Pathology on July 5th. The program entitled, "Ten Major Problems in Medical Practice" was presented by Mr. Wayne Conwell, President, Professional Management, Inc., St. Louis, Missouri.

Metatensin lowers blood pressure and keeps it low—effectively and economically. It combines reserpine with trichlormethiazide which affords more potent saluresis with less loss of potassium than from earlier thiazides. Reserpine contributes antihypertensive effect by relieving anxiety and tension. Metatensin is well-tolerated over long periods; with its effectiveness and economy it assures antihypertensive therapy you and your patients can stay with.

**BRING IT DOWN  
AND  
KEEP IT DOWN**

100  
102

## METATENSIN®

Each scored tablet contains:  
METAHYDRIN® (trichlormethiazide)  
2 mg. or 4 mg. and  
Reserpine 0.1 mg.

Usual adult dose: One tablet twice daily. Precautions and side effects: Patients with hepatic cirrhosis or diarrheal syndromes, or under therapy with digitalis, ACTH, or potassium-losing steroids, should be observed for signs of hypokalemia. With thiazides, electrolyte depletion, diabetes, gout, granulopenia, nausea, pancreatitis, cholestatic jaundice, flushing, mild muscle cramps, constipation, photosensitivity, acute myopia, perimacular edema, paresthesias, neonatal bone marrow depression in infants of mothers who received thiazides during pregnancy, skin rash or purpura with or without thrombocytopenia, may occur. With reserpine, untoward effects may include depression, peptic ulcer and bronchial asthma. Withdraw medication at least 7 days prior to electroshock therapy, 2 weeks prior to elective surgery.

Contraindications: Complete renal shutdown, rising azotemia or development of hyperkalemia or acidosis in severe renal disease.

Supplied: Metatensin tablets, 2 mg., 4 mg.—bottles of 100 and 1000.

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A session of the House of Delegates was held at 8:00 P.M. following the program.

### Chattanooga-Hamilton County Medical Society

The Society met on August 2nd in the auditorium of the Interstate Building. Scientific presentations included: "The Value of the Vectorcardiogram in Diagnosis of Myocardial Infarction" by Dr. Philip H. Livingston; and "The Osseous Patterns of Metastatic Disease" by Dr. John M. Crowell.

## NATIONAL NEWS

### The Month in Washington (From the Washington Office, AMA)

Health manpower and medical research are being reviewed in two comprehensive studies being conducted by the Federal government. President Johnson called on the new National Advisory Commission on Health Manpower for an evaluation of the use of available government and non-government health manpower. He also asked for commission recommendations on expanding the supply of health manpower.

"The national demand for health manpower today exceeds the supply—and this may be the case for several years," Johnson told the commission. "This fact gives your job a special importance. . . . First, I need your advice about the Federal government's use of its health manpower:

—“Are we setting an example for the nation in the efficient use of health manpower? Should we establish new forms of health manpower utilization? Second, we need answers to these same questions as they apply to non-federal health manpower. Third, we need your advice on how to develop additional health manpower—not only high-level specialists, but technicians and allied health professionals.”

The Advisory Committee met for the first time a few days after the House unanimously passed and sent to the Senate a bill to train more health workers. The measure sets up a three-year, \$155 million program

of aid aimed at training some 12,000 additional allied health workers such as medical technologists, therapists, x-ray technologists, dental hygienists, nutritionists, and laboratory technicians.

The legislation authorizes half the money for improving health worker training facilities and programs at qualified universities, colleges and junior colleges. The other half would go into a program of fellowship grants and federally guaranteed loans for students.

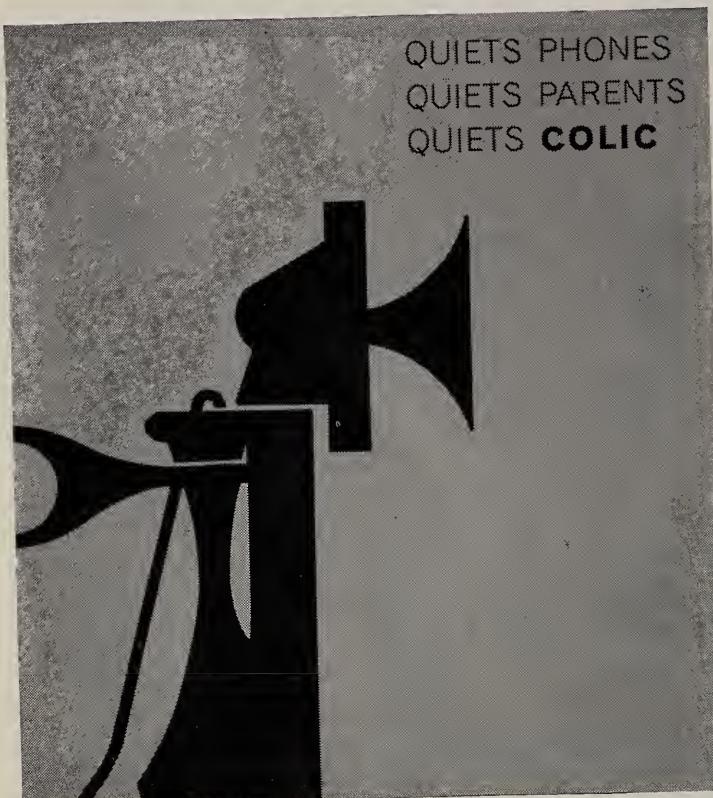
The bill also would authorize increased student loan forgiveness for physicians, dentists and optometrists who set up practice in poor rural areas where the supply of medical personnel is short or non-existent. Johnson instructed 23 Administration leaders in medicine and health matters, including Health, Education and Welfare Secretary John W. Gardner and the directors of the national health institutes, to re-examine their priorities to determine whether research activities should be slowed down and more effort devoted toward making practical use of research findings.

He asked for a report in a few months on a general reassessment of National Institutes of Health goals, effectiveness of current medical research programs, proportions of NIH funds being spent on basic research and on applied research, and major obstacles confronting the institutes in translating research findings into practical benefits.

The President was reported to have shown concern in a meeting with his top medicine and health advisors that too much is being spent "for the sake of research alone." Similar concern has been voiced by some non-government individuals knowledgeable in the health field.

National expenditures for medical research have increased from \$87 million in 1947 to an estimated \$1.85 billion last year. About two-thirds of the 1965 total was federal money and about four-tenths of the total was administered by the National Institutes of Health. In the two decades following World War II, NIH annual appropriations have zoomed from \$3 million to \$1.25 billion. In recent years, Congress voted

In colicky infants Pediatric Piptal with Phenobarbital slows down spasm, diminishes pain and crying and improves feeding patterns. It permits sleep and rest for patient and family. The less than hypnotic amount of phenobarbital in the recommended dose affords a mild, calming action and enhances the antispasmodic action of Piptal (pipenzolate bromide). The latter drug, as reported in the medical literature, has a favorable ratio of effectiveness to side-effects which is unusual in anticholinergics and thus is particularly appropriate to pediatric use.



**PEDIATRIC PIPTAL®  
WITH  
PHENOBARBITAL**

each cc. contains 6 mg. phenobarbital (warning: may be habit forming); 4 mg. Piptal® (pipenzolate bromide), and 20% alcohol.

Pleasant-tasting Pediatric Piptal with Phenobarbital is miscible in milk, formulas and fruit juices, and may also be given by dropper directly on the infant's tongue. Dosage is 0.5 cc. 15 minutes before feeding; in severe cases, 1.0 cc. four times daily. High doses may occasionally cause constipation with tenesmus and, rarely, flushing without fever. It is contraindicated in bowel obstruction or sensitivity to phenobarbital or anticholinergics. Available in 30 cc. dropper bottles, droppers calibrated to deliver 0.5 cc.

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NIH more money than the Administration has requested.

"The National Institutes of Health are spending more than \$800 million a year on biomedical research," Johnson said. "I am keenly interested to learn not only what knowledge this buys but what are the payoffs in terms of healthy lives for our citizens. . . .

". . . The nation faces a heavy demand on its hospitals and health manpower. Medical research, effectively applied, can help reduce the load by preventing disease before it occurs, and by curing disease when it does strike.

"But the greater reward is in the well-being of our citizens. We must make sure that no life-giving discovery is locked up in the laboratory."

## MEDICAL NEWS IN TENNESSEE

### University of Tennessee College of Medicine

Dr. William S. Clark of New York, president of The Arthritis Foundation, addressed the graduates of the University of Tennessee Medical Units in commencement exercises on June 12th. Of the 188 graduates, 48 received Doctor of Medicine degrees. Dr. Helen M. Stinson was the recipient of the Charles Verstandig Award, which is voted by members of the graduating class and is presented to the student who has overcome the most obstacles in becoming a physician. The first annual faculty award for "outstanding achievement as a surgical student" was presented to Dr. John Bostwick, III, of Bostwick, Georgia. Along with those qualifying to take their first steps toward actual practice in the health professions, graduates of fifty years ago who are still in community practice and service, received "Golden T" awards.

The Medical Units will change its medical and dental student programs to a one-class a year structure, if needed new facilities are obtained. The Board of Trustees has approved the change which will depend on the Legislature granting funds for the needed buildings.

Grants awarded to the Medical Units by the U. S. Public Health Service include: \$38,558 to the College of Medicine to support an instruction program in preventive medicine and research in chronic diseases found in large population groups; \$273,707 to the Department of Preventive Medicine, a seven-year grant to broaden the department's teaching program; and \$29,616 to the Units for research into the mechanics of resistance to virus infections.



Dr. Lionel Z. Naylor, formerly of Memphis, has been awarded a Southern Medical Association grant to receive residency training in surgery at the University.

### Meharry Medical College

Marion Bayard Folsom, director of the Eastman Kodak Company and a member of former President Eisenhower's cabinet from 1955-58, addressed the seventy-eight candidates for degrees at Meharry's 91st Commencement on June 13th. Before the degrees (53 in medicine, 17 in dentistry, 4 in dental hygiene, and 4 in medical technology) were conveyed upon the graduating seniors, Dr. Harold D. West, President of Meharry, presented special awards to nineteen graduates of the class of 1916 in recognition of fifty-years of service. Included among the awards presented to students for academic excellence was the Charles Nelson Gold Medal to Thomas Percival Logan, Petersburg, Va., as the fourth-year student attaining the highest general average in the school of medicine.



Meharry has been awarded three federal grants for training and teaching, totaling \$200,307. The department of psychology will receive a \$41,480 seven-year grant to support undergraduate training in psychiatry; and an \$81,108 one-year grant to fund a basic psychiatry residency program. The pathology department will receive \$77,719 to support five postdoctoral trainees.

### Heart Unit Increases Research Program

To launch its most extensive heart research and medical service program, the Middle Tennessee Heart Association has al-

In fact, there's as much iron...250 mg. ...in a 5 cc. ampul of Imferon (iron dextran injection) as in a pint of whole blood. When iron deficient patients are intolerant of oral iron...or orally administered iron proves ineffective or impractical...or if the patient cannot be relied upon to take oral iron as prescribed, Imferon (iron dextran injection) dependably increases hemoglobin and rapidly replenishes iron reserves.

WHAT'S THE  
COMMON  
DENOMINATOR?  
...IRON



## IMFERON® (iron dextran injection)

**IN BRIEF: ACTION AND USES:** A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

**COMPOSITION:** Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

**ADMINISTRATION AND DOSAGE:** Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

**SIDE EFFECTS:** Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoxoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

**PRECAUTIONS:** If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

**CONTRAINDICATIONS:** Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

**CARCINOGENICITY POTENTIAL:** Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

**SUPPLIED:** 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

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located \$60,584 for research and \$21,131 for medical service projects relating to diseases of heart and circulation. Research grants designated are: \$5,000 to Dr. Harold H. Sandstead, assistant professor of biochemistry and neurology at Vanderbilt University; \$4,950 to Dr. Leon W. Cunningham, professor of biochemistry at Vanderbilt; a fellowship to Dr. Alexander McLeod, assistant professor of medicine at VU for study in open heart surgery; and a fellowship to Dr. John P. Matthews of Vanderbilt for investigation of the aortic and pulmonary valves.

Another \$5,000 was approved for the support of student fellowships at Vanderbilt, and additional funds will be used to finance research projects on the state level. Medical service projects at the Bedford and Montgomery County Heart Clinics and the Cardiac Work Evaluation Clinic at Vanderbilt will receive continued support.

### New Cancer Lab at Oak Ridge

Construction has been completed in Oak Ridge on a new Atomic Energy Commission laboratory for use in cancer research. Completion of the Cancer Chromosome Laboratory will provide facilities for expanded cancer research by Oak Ridge National Laboratory's Biology Division. The new facility is an integral part of the Co-Carcinogenesis Research Laboratory which is used by the Biology Division under a joint program for cancer research supported by the AEC and the National Cancer Institute of the National Institutes of Health.

### New Medical Facility in Marshall County

A new medical care facility is scheduled to open in Marshall County on August 15th. The new facility, located in Lewisburg and to be called "Medicenter" is an intermediate facility specialized for the needs of non-acute patients still under medical care. It is designed to provide inpatient care between intensive hospitalization and a return to a normal and active life. The 61-bed Medicenter is locally owned and operated by Oakwood Hall, Inc. and will operate as a licensee of Medicenters of America, Inc.

### Commendation to the Woman's Auxiliary of the Tennessee Medical Association

The Woman's Auxiliary to the TMA re-

ceived an award of merit for its outstanding efforts in the American Medical Association-Education and Research Foundation program in 1965-66. A special achievement award was presented to the Auxiliary of the Chattanooga and Hamilton County Society for the largest donation in its membership category. The Tennessee Auxiliary made the greatest contribution of any state group in the 1,000 to 1,500 membership category—\$21,881.11. Only two other states, California and Ohio, exceeded this amount, and these states are included in the 3,000 member category.

The presentations were made during the 43rd Annual Convention of the Woman's Auxiliary to the American Medical Association in Chicago, June 26-30.



Mrs. Erle E. Wilkinson of Nashville was elected to a second term as Southern regional vice president of the Woman's Auxiliary to the American Medical Association. Mrs. Wilkinson has served as president of the County and State Auxiliary; and from 1962-65, she was national chairman of the Auxiliary's AMA Education and Research Foundation Committee. Under her direction, the physicians' wives raised more than \$1 million for medical school grants and loans to medical students, interns and residents.

## PERSONAL NEWS

**Dr. Crawford W. Adams**, Nashville, was elected Chairman of the Section of Diseases of the Chest of the American Medical Association at the recent AMA meeting in Chicago.

**Dr. William C. McAfee**, Jackson, is associated with the Jackson Clinic in the practice of dermatology.

**Dr. John D. Lay**, Savannah, has been elected to active membership in the American Academy of General Practice.

**Dr. Glenn E. Horton**, Memphis, was moderator of two Workshops at the recent meetings of the American College of Allergists held in Chicago. Dr. Horton appeared on another Workshop where he presented a paper on a practical instrument in evaluating the patient with respiratory allergy. During the regular lecture section, he presented a paper on Lactose Intolerance which was co-authored with **Dr. Lawrence Wruble** of Memphis.

**Dr. Frank E. Whitacre**, retiring professor of obstetrics and gynecology at Vanderbilt University

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and head of the department of obstetrics and gynecology at Nashville General Hospital, was honored by persons who had served under him at a dinner on June 18th at Hillwood Country Club. Dr. Whitacre, who was presented with a gift by his former residents from the University of Tennessee College of Medicine, Vanderbilt University and Nashville General Hospital, will remain as professor emeritus of obstetrics and gynecology at Vanderbilt University.

**Dr. John F. Cason**, formerly of Murfreesboro, has moved to Byrdstown to open his office for the practice of medicine.

The West Tennessee Heart Association, at its Eighth Annual Membership Meeting, elected **Dr. William B. Acree** of Ridgely as President for 1966-67.

**Dr. R. H. Hutcheson, Jr.** has recently accepted the position of director of maternal and child health, Tennessee Department of Public Health. He succeeds the late Dr. M. F. Brown.

**Dr. Thomas F. Frist**, Nashville, was guest speaker at a meeting of the Dickson Kiwanis Club on June 27th.

**Dr. Walter C. Beahm**, Knoxville, was elected president of the Tennessee Valley Academy of General Practice, succeeding **Dr. Harry Ogden**, also of Knoxville.

**Dr. Joe Henderson**, Maryville, was named vice-president, and **Dr. Fred Furr**, Knoxville, secretary-treasurer.

**Dr. Robert L. Harrington**, Donelson, has joined the staff of Drs. Kerr, Moore and King in Dyersburg. Dr. Harrington will practice obstetrics and gynecology with Dr. Elton King.

**Dr. M. D. Ingram**, Gibson County Health Director, has been honored for his outstanding success in the county during his career of 39 years. Dr. Ingram was named "Co-Worker of the Year" by the Public Health Workers Council, made up of 20 West Tennessee Counties.

**Dr. Billy C. Nesbett**, formerly of Crossville, has opened his office for the practice of pediatrics and general practice in Celina.

**Dr. Howard C. Pomeroy**, Old Hickory, has been elected president of the medical staff at Madison Hospital.

**Dr. Wm. K. Owen**, Pulaski, participated in a seminar at Central State Hospital in Nashville on May 26th. His subject was "The Family Physician and After Care—How Can the State Hospital Contribute More to the Success of this Problem?"

**Dr. James H. Donnell**, formerly of Ripley, has moved to Alamo to practice at the Alamo Clinic, the former Prather Clinic.

**Dr. Donald W. Bales**, Kingsport, has been inducted into Fellowship in the American College of Physicians.

The Tennessee Valley Lions Sight Service Association honored **Dr. William P. Gollihar**, Chattanooga, for his sight conservation work, at the monthly meeting of the Lions organization on June 2nd.

**Dr. William V. Ginn, Jr.**, formerly of Memphis,

has opened his office for the practice of medicine in Union City.

**Dr. Donald A. Goss** has been appointed chairman of Vanderbilt University medical school's department of obstetrics and gynecology.

**Dr. Walter K. Hoffman**, associate professor at the University of Tennessee College of Medicine, was guest speaker at a recent meeting of the Memphis Rotary Club.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966

	State
Sept. 26-27	Tennessee Valley Medical Assembly, Tivoli Theater, Chattanooga
Oct. 12-13	Second Annual Tennessee Mental Illness & Health Congress, Hotel Hermitage, Nashville
Nov. 9-11	Tennessee Academy of General Practice, 18th Annual Scientific Assembly and Congress of Delegates, Gatlinburg Auditorium, Gatlinburg
	National
Sept. 8-10	American Association of Obstetricians and Gynecologists, The Homestead, Hot Springs, Va.
Sept. 16-24	American Society of Clinical Pathologists, Washington Hilton Hotel, Washington, D. C.
Sept. 17-23	College of American Pathologists, Washington Hilton Hotel, Washington, D. C.
Sept. 29-Oct. 2	American Medical Writers' Association, Annual Meeting, Waldorf Astoria, New York City
Oct. 1-5	American Society of Anesthesiologists, Sheraton Hotel, Philadelphia
Oct. 1-7	Annual Otolaryngologic Assembly of 1966, New Illinois Eye and Ear Infirmary at the Medical Center, Chicago
Oct. 2-7	American Society of Plastic and Reconstructive Surgeons, Inc., Flamingo Hotel, Las Vegas, Nev.
Oct. 10-13	American Academy of General Practice, War Memorial Auditorium, Boston
Oct. 10-14	American College of Surgeons, Fairmont Hotel, San Francisco
Oct. 13-15	Association of American Physicians and Surgeons, Disneyland Hotel, Anaheim, Calif.
Oct. 15-16	American Association of

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Oct. 16-21	Ophthalmology, Palmer House, Chicago American Academy of Ophthalmology & Otolaryngology, Palmer House, Chicago
Oct. 17-20	American Academy of Neurological Surgery, San Francisco
Oct. 17-22	Congress of Neurological Surgeons, Americana Hotel, San Juan, P. R.
Oct. 21-25	Association of American Medical Colleges, San Francisco Hilton Hotel, San Francisco
Oct. 22-27	American Academy of Pediatrics, Palmer House, Chicago
Oct. 23-26	American College of Gastroenterology, Bellevue - Stratford Hotel, Philadelphia
Nov. 2-3	American College of Preventive Medicine, San Francisco Hilton, San Francisco
Nov. 3-5	Southeastern Chapter, Society of Nuclear Medicine, Durham, North Carolina
Nov. 26-27	American College of Chest Physicians, Flamingo Hotel, Las Vegas, Nevada
Nov. 27-30	American Medical Association, Las Vegas, Nevada
Dec. 2-7	American Academy of Dermatology, Palmer House, Chicago
Dec. 5-7	Southern Surgical Association, the Homestead, Hot Springs, Va.

### Second Tennessee Congress on Mental Illness and Health

The Second Tennessee Congress on Mental Illness and Health, sponsored by the Tennessee Medical Association, the Tennessee Mental Health Association, and the Woman's Auxiliary to the Tennessee Medical Association, will be held in Nashville on October 12-13 at the Hermitage Hotel. The program is designed to present information about such pertinent topics as emotional factors in disease, the psychiatric emergency, psychotherapy by the physician, religion and health, the emotional problems of children, mental retardation, community mental health services, and others. All physicians are invited and urged to attend.

### Disability Section Meets With County Societies

Dr. James C. Gardner, Administrative Medical Consultant for the Tennessee Disability Determination Section, reports that for the past four months, agency personnel and staff physicians have been responding to invitations to speak at county society meetings. These requests come as a result of correspondence sent by Dr. Gardner to the president and secretary of each society in the state. The representatives and doctors from the agency provide a program designed to familiarize

Tennessee physicians with the process of adjudicating claims for Social Security disability benefits and to give opportunity for questions, criticisms and suggestions. Also, these meetings have served to explain recent changes in the disability law. Dr. Gardner reports that the interest and response throughout the state has been excellent. In the brief time that this program has been available, it has been presented to more than fourteen societies representing over thirty-two counties. The fall schedule is now being prepared and arrangements can be made by writing to: Dr. James C. Gardner, 1808 West End Avenue, Seventh Floor, Nashville, Tennessee 37203.

### American Academy of Pediatrics

A diverse scientific program featuring discussion of such timely subjects as growth hormone and disorders of growth, intrauterine growth retardation, and clinical trial of live attenuated rebella virus vaccine, 26 round table discussions including 3 Spanish, 11 seminars, and a host of social activities will highlight the 35th annual meeting of the American Academy of Pediatrics in Chicago, October 22-27. More than 4,500 pediatricians, their families and guests, are expected to attend in the Palmer House Hotel.

The meeting is open to physicians who are not pediatricians. Registration fees are \$16 for Academy members, applicants to the Academy, applicants to the American Board of Pediatrics, non-members out of school less than five years, and physicians in the Armed Forces. Registration fee for non-member physicians out of school more than five years is \$50.

Interested physicians may write the American Academy of Pediatrics, 1801 Hinman Avenue, Evanston, Illinois 60204, for a preliminary program and housing and registration forms.

### Intensive Coronary Care Nursing

A course in intensive coronary care nursing will be given at Baptist Hospital, Nashville, beginning October 31st. The course, supported by the Public Health Service and the Middle Tennessee Heart Association, will be open to any graduate nurse in Tennessee, with a limit of two nurses from any one hospital.

The first week of the course will consist of lectures on the anatomy and physiology of the heart and on arrhythmias, including their electrocardiographic recognition. The second week will consist of lectures on coronary artery disease, myocardial infarction and its complications, further instruction in electrocardiographic interpretation, and the use of the various monitors and defibrillators used in coronary care units. Individual instruction and demonstration will be an integral part of the course.

Later, a third week will be spent gaining practical experience in a coronary care unit. For further information, write to the Director, Coronary Care Unit, Baptist Hospital, Nashville, Tennessee.

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# The Journal of the TENNESSEE MEDICAL ASSOCIATION

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## Instructions to Contributors

Manuscripts submitted for consideration for publication in the JOURNAL OF THE TENNESSEE MEDICAL ASSOCIATION should be addressed to the Editor, Dr. R. H. Kampmeier, Vanderbilt University Hospital, Nashville 12, Tennessee.

Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, J. Tennessee M. A., 35:182, 1950.

Illustrations must be mounted on white cardboard and be numbered. The editor will determine the number, if any, of illustrations to be used. Additional illustrations will be charged to the author. The author's name should appear on the back of each illustration.

If reprints are desired, the requested number should be indicated in the letter accompanying the manuscript. The author will be billed by the publisher.

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R. H. KAMPMEIER, M.D., Editor

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# Journal of the Tennessee Medical Association

## OWNED AND PUBLISHED BY THE ASSOCIATION

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No. 9

Anorexia nervosa is a baffling clinical problem for the practitioner. The psychodynamics which may be involved are described in this case report of anorexia nervosa in a child.

## Pre-Pubertal Anorexia Nervosa\*

KENT KYGER, M.D.,† Nashville, Tenn.

### Introduction and Definition

Anorexia nervosa is the main psychiatric killer of children in infancy and adolescence. Indeed Blitzer and associates<sup>1</sup> believes it is the only one. In the nomenclature of the American Psychiatric Association it is a psychophysiological gastrointestinal reaction consisting of the triad of anorexia, emaciation, and amenorrhea. A good diagnostic criterion is at least a 20% loss of weight. It is not a disease entity but a syndrome. It is a psychosomatic complex, a later manifestation of serious illness in a seriously disturbed child with a variety of unmet needs. The name is a misnomer since food restriction initially is voluntary and not due to loss of appetite. True anorexia occurs later and is apparently secondary to starvation. Anorexia in an adolescent is a more serious disorder than it is in a younger child where it is less an illness and more a form of opposition to parental domination.

The purpose of this paper is to review the literature and present a patient's history, which illustrates the many complexities of the condition.

### Review of the Literature

Morton first wrote of the subject in 1694 as a "nervous consumption." Apparently the first case in this country was the daughter of Captain Miles Standish! Sir William Gull<sup>2</sup> named the syndrome in his 1874 paper describing amenorrhea, bradycardia, constipation, remarkable and cease-

less activity despite extreme emaciation, occurring more frequently in females. He ascribed it to a "perversion of the ego." Since then many papers have appeared on the condition in adults, but few have focused on children and adolescents. Blitzer and collaborators<sup>1</sup> and Falstein and associates<sup>3</sup> both made excellent surveys of the literature and bibliographic compilations.

### The Syndrome

The following hypothetical case typifies the syndrome. The patient would be a puberal girl with a long history of eating difficulties:

- (1) Feeding disturbances in infancy and childhood.
- (2) An alternation of bulimia and mild starvation preceding clinical onset.
- (3) Often an onset as a "diet" related to puberal self-consciousness, or to competitive situations beyond her coping capacity.
- (4) Conflicts with the parents over food, weight, and eating in a family which has overinvested eating with cultural symbolism.

The precipitating event is nonspecific but may be related to loss of real or fantasized love object. After its clinical onset, the patient is preoccupied with food, selects low calorie foods when forced to eat, seeks vicarious satisfaction from fixing and feeding food to others, and may secretly force herself to vomit after meals. The seriousness of the emaciation and the illness itself is strongly denied by her, even when her "Auschwitz appearance" alarms those about her. She shows considerable skill in controlling and manipulating all persons involved in her care, playing them one against another, and generally defeating

\* Read at the meeting of the Tennessee District Branch American Psychiatric Association, April 19, 1966, Gatlinburg, Tenn.

† From the Department of Psychiatry, Vanderbilt University School of Medicine, Nashville, Tenn.

the therapeutic regimen. Often she will make a quick transitory weight gain and flight into health to escape therapy. She is an immature girl with many compulsive and hysterical traits. She is overly concerned and anxious about menstrual and sexual matters. When examined her varying clinical findings will be found to relate solely to the duration and degree of starvation. Her only endocrine disturbance is gonadal failure due to gonadotropic insufficiency; she will have no evidence of primary thyroid or adrenocortical insufficiency.

#### Etiology and Dynamics

(1) *General Psychological Aspects.* In Kay and Leigh's 4 cases they found that 50% had obsessional traits. Fenichel<sup>5</sup> said anorexia nervosa occurred in: (1) hysteria, as a fear of oral impregnation; (2) compulsive neurosis, as an ascetic reaction formation; (3) depressions, as an effect equivalent; (4) schizophrenia, as a symbolic refusal of contact with the world; (5) organ neurosis; (6) a developmental ego disturbance in an orally fixated individual. Lesser and associates<sup>6</sup> considered the syndrome to be a reversion to an infantile method of passive hostile control. Blitzer and collaborators<sup>1</sup> stated that the connection with food becomes apparent only in the context of the individual child's and his family's myths and fantasies. In the children he found: bizarre fantasies of animistic food ideas; delusions of foods as poisons; fears of oral impregnation; ideas of gastric pregnancy and anal birth; orally aggressive and sometimes cannibalistic impulses; equation of not eating with maintaining a life-long childlike dependent status. He thought the defense mechanism of isolation of affect made it possible for these ideas to be accessible to awareness (rather than a more psychotic process?). A "non-classical" depression was manifested in most of his cases, though it was not an exclusive cause. There was a deeper regression than that seen in other psychic and physical disorders of equal severity. In the parents he found the following to be common: severe ambivalence toward the child; unconventional ideas about food and eating; power struggles with the child using food as the

battleground; overweight; sexual misconceptions and problems; early use of feeding as compensation for unconscious rejection. As illustration of its many meanings Falstein and associates<sup>3</sup> said: "Food may symbolize the breast, genitals, feces, poison, parent or sibling. Eating may be equated with gratification, impregnation, intercourse, performance, pleasing mother, growing or it may represent destroying, engulfing, killing, castrating, or cannibalism."

(2) *Psychologic Aspects in Boys.* Boys comprised 20% of Kay and Leigh's<sup>4</sup> cases where they found the syndrome to be an expression of "bowel hypochondriasis," obsessive-compulsive states, or of a depression. Falstein's<sup>4</sup> 4 pre-pubertal boys all had a strong hostile feminine identification with the mother, based on a food-oriented imitative relationship with her. Though this defense had individual meaning, Falstein found in all patients ambivalent mothers who compensated for this unconscious rejection and death wishes with over-feeding and indulging their sons. Later they actively pushed dieting in these obese boys at puberty. Fearing growth and masculinity, and wishing to remain in an infantile dependence, the boys began then to consciously starve. The mothers, panicked by the results, themselves regressed to earlier forced feeding patterns. Now it became a struggle for supremacy. The boy retaliated with oral and anal sadism. Unconsciously he wanted to "starve out and kill the incorporated mother," to "kill and remove the female fat."

(3) *Psychosomatic Aspects in Girls.* There is some uncertainty about the endocrine-nutritional relationships. For instance the amenorrhea does not seem (in post-menarche patients) to have a simple direct relation to the starvation. Frequently amenorrhea precedes clinical malnutrition (due then to a complex psychophysiologic process?). Cyclic hormonal function is often not re-established for some time, occasionally never, after correction of the malnutrition (due to permanent endocrine nutritional damage?). Russell<sup>7</sup> for one hypothesizes a dysfunction of the ventrolateral nucleus of the hypothalamus (which then serves as a predisposing factor in the

selection of this particular syndrome in any given case?).

(4) *Summary.* In general one may say that the syndrome is a defense against growing up and assuming an adult sexual role in a variety of psychic disorders. Kay and Leigh<sup>4</sup> put it well when they said: "There is no neurosis specific to anorexia nervosa, and no specific anorexia nervosa." Perhaps some of the differences are due to the level of regression at which the patient is first seen, and/or to the level of depth psychotherapy is taken.

### Treatment

Though many kinds of treatment have been suggested and tried, most authors now recommend psychiatric-milieu in-patient treatment, with concurrent psychotherapy of some kind for both patient and parents. In the child massive denial and disturbed object relations often interferes with forming a therapeutic alliance. Most agree that the child must be separated from its parents and treated in the hospital at least initially. It is important to institute supportive nutritional measures before malnutrition causes permanent irreversible damage to the body. Blitzer<sup>1</sup> for instance believes more deaths could be prevented if tube feedings were started earlier. However, treatment with anabolic agents, nutritive supplement, and hormones fails eventually except as adjuncts to psychotherapy.<sup>8</sup>

*Outcome.* In their 38 cases Kay and Leigh<sup>4</sup> reported a doubtful prognosis for cure and a 15% mortality. Falstein's<sup>3</sup> results were not encouraging:—of his 4 boys 2 terminated their clinical course early and 2 relapsed. Lesser and associates<sup>6</sup> reported 15 girls, ages 10 to 16 years with a weight loss of 10 to 40 pounds. The resulting "social adjustments" were good in 7 of 8 "primarily hysterical" patients, 3 fair and 1 poor in the 4 "primarily obsessive-compulsive" patients and 2 fair and 1 poor in the 3 "primarily schizoids." Of Blitzer's<sup>1</sup> 15 cases (12 girls) 9 "recovered," 4 showed "slight improvement," and 1 died of starvation. Again the "hysterical" patients fared best, all 6 recovered. When it occurs, death is due to starvation; suicide by other means is rare. Many cases go on through life as chronic anorexics, their endocrine and car-

diocirculatory systems functioning efficiently at low levels.

### Case Report

The case to be presented is in many ways classical but the patient had unusual capacity for psychotherapeutic work.

*History from Parents.* The patient was an 11 year old girl whose parents interrupted high school to marry as teenagers, supposedly partly because of loneliness from a mutual parental loss. The patient was the first child. She was born "prematurely" at 7 months at a birth weight of 5 lbs. 13 ozs. (a cause of the early marriage?). Still she was isolated a week or so in an incubator. She was bottle-fed since the mother was "advised" against nursing because of the "prematurity." The patient was a poor feeder, too "slow and sleepy", and had vomiting for several weeks. There were many formula changes as she lost weight down to 5 lbs. Development was normal otherwise. The patient "weaned herself" at 9 months.

When she was subjected to both the birth of her sibling and toilet training at one year of age she rebelled and training was postponed until she was 19 months old. When the patient was 2 years of age the mother returned to high school, and at 3 to teaching special classes (working days and many nights). The father also returned to school about this time. The children were kept by a combination of nursery school, the paternal grandmother, and the father while studying. The patient heartily disliked all this. She was put into one of her mother's courses; she rebelled and quit, despite her mother's pleadings. At about age 3 or 4 she was caught playing at taking "rectal temperatures" with her brother. At this time it was found that she had a vaginal discharge which required medical treatment. At 4 and 5 years she was returned to her mother's course and was sent to kindergarten (both of which she disliked). At 6 she started school, doing well with grades, peers, and teachers until the present illness. She resisted the taking of rectal temperatures when a tonsillectomy was done at age 6 years.

Tomboyish activities were suppressed by the mother and the brother at about 9 years. The patient then turned to housekeeping activities, assuming maternal behavior toward her family. The mother tried to treat her like a "sister." The parents thought the patient had felt she was compared to, and in competition with the brother, whom they saw as "smarter, bigger, calmer, easier-going, older-looking, and probably superior" (and probably preferred). The patient was called a "pest" about neatness, cleanliness, orderliness, collecting and church activities. Two years before admission the maternal grandfather died; he had given some medical care to the patient. The patient showed little reaction, but peculiarly avoided the funeral. She was told her periods were about to start 18 months before admission

when she was seen for a "prepubertal vaginal discharge." It upset her greatly to hear of another girl's exposing herself at school, of illegitimate pregnancies, or reports of rape. After a summer camp, where there was much menstrual talk, she grew less confidential with her mother, but asked so many questions that she was taken to a doctor for a "sex talk." A girl friend teased her slightly about being fat. A friend started her periods and the patient thought that made her fat. The teacher "rode" the "fatties" in the class to reduce and to avoid fatty foods at menarche. The patient's estimated maximum weight was 65 pounds; she had never been fat. She became bashful, less sociable, nervous, and easily tearful. Restless sleep and frequent nocturia were noticed (she shared a room with her one-year younger brother until 4 months before admission). She seemed to have more energy and exercised excessively and secretly. Pushing, neglect, cajolery—everything made her starvation worse. She tried to eat now, but it caused stomach pains.

Eight months prior to admission, when the patient had lost 10 pounds, physical checkup at a local hospital was reported to be normal. Weight loss continued. Six months before admission she had a thorough study at a university hospital. Again no physical disease was found. Relevantly or irrelevantly, while in the hospital, she had gained 2 to 3 pounds and had more sex lectures. The family moved to another city 4 months before admission, and the move was followed by further loss of weight. After a trial of out-patient psychotherapy and tranquilizers proved unsuccessful in halting her illness, the patient was hospitalized in a psychiatric unit where she was first seen by me.

**Examination.** Upon admission she presented as an emaciated, sallow colored, hollow-cheeked, frightened little girl. Physical examination by the pediatric staff revealed a B.P. of 90/60, P. of 80, T. 98.4, R. 16. Admission weight was 52 lbs. (at the 7 to 7½ year old level); the height was of age 10 years with chronologic age of 11 years, 11 months. She had a furuncle on the nose. There was extreme malnutrition.

**Laboratory Studies.** There was a normal urinalysis, W.B.C. count of 5300 with 51 P.M.N., 32 lymphocytes, 9 monocytes, 5 P.M.E., and 3 P.M.B. The VDRL was non-reactive and skin tests with OT. and histoplasmin were negative. The Hgb. was 11.5 GM. The chest x-ray was normal.

The consulting pediatric endocrinologist found early minimal puberal changes in the breast and in the vaginal epithelium. No primary endocrine disorder was found. In his opinion only secondary hypopituitarism and arrest of early minimal puberal sexual maturation was present because of malnutrition.

Psychologic testing revealed: (1) a WISC full scale I.Q. of 114; and (2) on projectives: "a very inhibited girl, with no release of fantasy or aggression; much bodily concern; strong oppositional qualities; self-denial used to punish others;

some withdrawal and depersonalization but no psychotic process; a notably absent relationship with the father but a very important one with the mother, who was seen as having all authority and supplies; use of the symptom as also an appeal for help, attention, and nurturance.

**Hospital Course.** In the first 3 weeks of hospitalization her weight fell 3 more pounds. Because of this, treatment with insulin 10 units, t.i.d., and thioridazine (Mellaril), 25 mg., q.i.d. were given, raising the weight to 69 pounds by 8 weeks after admission. Medication was stopped and the weight was stable for 4 weeks. Insulin 5 units, t.i.d. was then given for an additional 5 weeks and her weight rose to 75 pounds. She has remained at this normal weight since. Insulin was resisted subtly and was used as a minor battleground with her therapist. She had several mild insulin reactions. School and ward behavior were good, perhaps too good, and she phobically avoided all conversation involving profanity, sexuality or menstruation. Substitute satisfaction in fixing and feeding food to others was prominent, as was her excessive exercising. However, she slowly developed a rather typical pattern of teenage interests and behavior.

### Discussion of Therapy

In this case the therapy might best be covered in an excerpted form as it emerged in the treatment itself and as seen by the patient. It can conveniently be divided into four stages.

The first was denial. In this phase she stated or implied that all her problems were now solved since she had sexual enlightenment. She had no difficulties, no worries, indeed no significant feelings about anybody or anything! Now she could eat at home—on her own. Some of the superficial sexual formulas which she had learned on previous hospitalizations were mouthed, and that should satisfy any psychiatrist! If, in an off-guard moment, a sensitive subject slipped in, the whole trend could be blocked by suddenly turning on a torrent of tears.

As the therapeutic relationship developed, the second stage of "confession" and objective self-observation began—first of her symptoms, then of her fantasies. Gradually her generalized inhibition of all her impulses and feelings were seen—not just of eating, but of sexual, aggressive, constructive, and competitive nature. Compulsions emerged,—such as the need to apologize repeatedly after small or imagined offenses, to exercise violently after eating,

that everything was characterized as "wrong" or "not wrong," etc. She admitted knowledge of nutrition; low calorie foods were picked when she felt absolutely forced to eat something. She told that in the past she had approached the table wanting to eat, but something she did not understand stopped her. "You're hungry, but you feel food is disgusting and dirty (feces?). To eat?—well that meant to grow, to grow up and get fat. Fat people look pregnant and are people who can't control themselves. To grow up means to have periods, sex relations, a baby, and to leave mother. Periods are messy; they come from an egg bursting in some blood cells. When periods start a boy's sexual desire for you, and yours for him increases beyond control. You can't resist, so you become loose and wild, get pregnant, and forced into a bad early marriage. Mother says early marriage is bad, but you can't have sex until you're married—that's not fair because mother did and does both herself. Being skinny protects you, it makes you sexually unattractive. Mother pushes maturity, but you're afraid; it's safer to stop growing, to stay a child at home with mother. Having sex relations is harmful, dirty, and maybe poisoning because it consists of urinating on each other. It's bad and dangerous to be wild, but you secretly envy and admire girls you hear about that are brave enough to do exciting things in spite of the possible consequences. Being raped is a constant worry, but there's not much real danger of that. What you really fear is that you get excited, not resist, lose control, and give in. Strong feelings are what are really dangerous. Eggs are not only babies, so shouldn't be eaten, but also they may grow inside of you—besides it's an egg that starts a period. Somehow a portion of any food is that way; if you don't eat the whole portion it has no power of growth inside you because it's not intact. I used to be careful eating watermelon, if you swallowed a seed I thought it would grow inside. Mother, the doctor and the teacher lectured me on correct sexual information; I know what is correct—yet I can't help feeling it's these other ways. It still seems like babies probably get out through the rectum. If you had a baby inside of you, and you didn't eat, it

wouldn't grow. There wouldn't be any trouble then."

In the *third stage*, the most difficult for her, she recovered traumatic events and feelings associated with them. She recalled the sexual play with her brother and how she had sought it for the intense pleasure associated with it. After this was suppressed by the mother she carried it on alone at night—playing at undressing for an examination by her brother or a "doctor" and gaining erotic pleasure from fantasized manipulations. She continued this until age 8 or 9. At puberty she feared somehow the desire for this play with her brother would return, and then with a possible danger of pregnancy. In some ways she feared it may have *already* made her pregnant. She remembered erotic pleasure from stooling itself, and it seemed she pretended the stools were babies. Constipation from starvation put an end to the babies coming out and also kept her from losing any that might be inside. Though she could not quite bring herself to think that her conception caused her parent's early marriage, and was therefore a basis for rejection, she did feel she had initially been an untimely and unwelcomed burden. "They had to finish school to support a family." At the same time her presence made their working their way through longer and harder. Her needs as a child weren't satisfied, so she was not ready to move on. She saw the absence of her working parents as a rejection of her, especially by the mother. She thought her mother preferred the children in her classes, and her brother. (The rejection pattern seemed set at birth, and repeated at her brother's birth and when her mother went to work.) She began to see that in turn she herself rebelled against and rejected her mother. She uncovered a terrible anger felt toward her mother. She rejected her mother's classes, food, sexual information and precepts, desire for her to quickly mature, accept womanhood, and be more a sister and less a daughter. Finally, by going to the hospital she left the mother when the latter quit work and returned home full-time, as the mother had left her earlier. Simultaneously both were punished by the symptom. She saw it upset her mother more and more:

"Mother had more headaches and took more and more aspirin and nerve pills." Her angry parents used punitive methods to make her eat. They argued among themselves about her eating: "Father blamed mother and her working." She knew her father had a violent temper; he had physically attacked the mother in the past. She worried about a divorce because of this. So, in a peculiar way she felt her symptom might anger the father in attacking the mother, and yet simultaneously deflect the parent's anger from each other to her and thereby save the marriage!

Since she felt inferior to both the mother and the brother, she tried to find ways to surpass them. Attention from the family was sought in boyish ways, but it was not effective and it was eventually suppressed. Concentration on academic achievement and involvement in maternal duties were turned to without success. She felt she did as poorly in her mother's role as she had in her brother's. Yet she simultaneously feared doing too well in the mother's role—that might result in displacing the mother, becoming sexually more attractive to the father, and stimulating a jealous murderous rage in the mother. She was a "poor boy" and a "poor girl." Her illness on the other hand provided attention, solicitude, and dependency gratification. The weight loss also made her seem to herself to be the younger sibling, the asexual baby. In some ways she was in control of the family. Even so, their pressuring and the "whole mess" made her wish she were dead.

The fourth and final stage was that of reconstruction and reorientation. As things were worked through, she became a vivacious outgoing "normal" teenager. She regretted that her illness would delay her menarche and put her behind her age group. "Growing up was not all facing dangers, there was also more fun and things you got to do." She was missing a lot of activities that her friends were engaged in back home; she was missing life. All her problems had to be worked out thoroughly in therapy so they wouldn't return to "interrupt" her life again. We felt her insight was made secure in this stage.

#### Summary

The literature on pubertal anorexia ner-

vosa has been reviewed. Such a case has been presented in which the meaning and purpose of the symptom seemed to be: (1) Part of the suppression of all "dangerous" impulses; (2) Phobic avoidance of food because of,—(a) hysterical fantasies of oral impregnation and animistic conceptions of food; and (b) an anal equation of food, feces, and babies—as well as persisting fantasies of anal (cloacal?) birth; (3) Defensive halting of maturation to avoid, (a) adult sexuality problems and attending identification and competition with the mother; and (b) to cling to childhood, and unmet dependency needs; (4) A counter-rejecting indirect expression of anger at the mother; (5) A simultaneous punishing of mother and patient; and (6) Various secondary gains of attention and environmental control.

Beside her return to her own home and public school, discharge plans included continuing in occasional outpatient therapy until puberty is completed and the stability of her improvement is assured. Members of her family improved a great deal through casework, and because of the ending of their chronic fatigue and stress from long years of overwork and financial strain when the father finally graduated from school. Then with the father going to work and the mother quitting work and returning to the home full time, the whole family pattern became happier and more normal.

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The author describes the pathophysiology of this congenital condition and emphasizes adequate treatment quite promptly.

# Goniotomy in Congenital Glaucoma\*

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Congenital glaucoma is a rare disease of infants which rapidly produces permanent impairment of vision. Thus the diagnosis and early treatment is extremely important to the affected patient who has a whole life ahead of him. Ophthalmology owes a debt of gratitude to Dr. Otto Barkan<sup>1</sup> for having reintroduced and perfected the operation of goniotomy, first proposed by de Vincentiis<sup>2</sup> in 1893. By this operation the cause of the hypertension is attacked directly with a minimum of trauma to the remainder of the eye. This report is based on 50 cases operated upon for congenital glaucoma between the years 1943-1964.

## Pathogenesis

The pathologic picture plus the normalization of intraocular pressure by goniotomy demonstrates conclusively that the cause of congenital glaucoma is an obstruction to the outflow of aqueous into the canal of Schlemm. It is believed that in rare cases there may be a congenital absence of the canal of Schlemm.

Gonioscopic examination reveals an anterior chamber angle which appears to be filled with a gray or grayish yellow tissue. (Fig. 1.) The last roll of the iris is pulled

forward toward Schwalbe's line and has an irregularly serrated appearance. In some cases the iris processes are very prominent.

Barkan,<sup>1</sup> judging by the gonioscopic appearance, stated that the cause of congenital glaucoma was a persistence of mesenchymatous tissue in the angle of the anter-

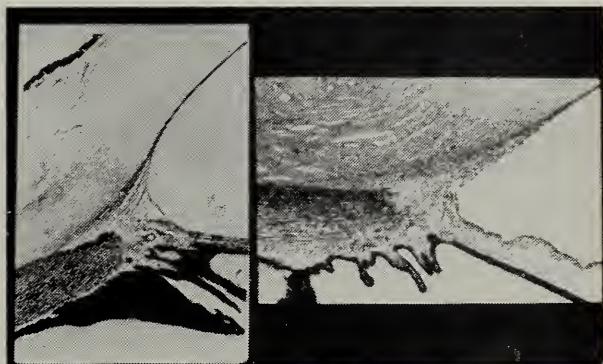


FIG. 2. Pathologic sections in eyes affected with early congenital glaucoma. The sections indicate clearly the surgical necessity of the cases.



FIG. 1. Typical gonioscopic picture of the angle of anterior chamber in congenital glaucoma.

\*Read before the meeting of the Tennessee Academy of Ophthalmology and Otolaryngology, April 19, 1966, Gatlinburg, Tenn.

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ior chamber which prevented access of aqueous to the corneoscleral trabeculum and canal of Schlemm. Later microscopic studies carried out by Allen, Burian and Braley,<sup>3</sup> Shaffer<sup>4</sup> and Maumenee<sup>5</sup> demonstrated that the real cause of the obstruction was a failure of the iris and ciliary to separate from the corneoscleral trabeculum. Unfortunately there have been only a few eyes available for pathologic examination in the early stages of the hypertension, i.e., free of secondary changes which hide the basic condition. In every eye examined as a consequence of the unexpected death of the child, in complete separation of the iris and ciliary body from the corneoscleral trabeculum has been observed. In some cases only the anterior half of the trabeculum has been exposed to aqueous leaving the posterior part of the angle closed. In other cases delicate sheets of tissue separated by spaces are seen filling the angle. These angles resemble the angles of animals. The inferior layer of these later cases undoubtedly corresponds to the membrane and iris

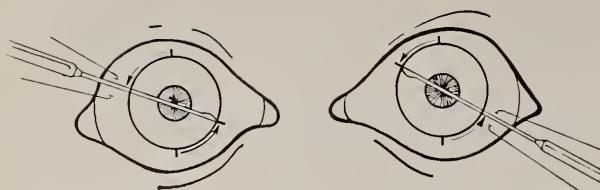


FIG. 3. Diagrams showing (A) rotation of the right eye with goniotomy knife in place; (B) rotation of left eye with goniotomy knife in place.

processes seen between the iris and Schwalbe's line by gonioscopy.

### Physiopathology

Considering the pathological physiology of the filtration angle it is evident that the pathogenic conditions of congenital glaucoma have existed since birth. Usually, however, the symptoms do not begin until several months later. Moreover, the level of the intraocular pressure is not found to be high in most cases despite the fact that the eye shows enlargement and clouding of the cornea.

It is supposed, then, that the obstruction to aqueous outflow is not complete and that the production of aqueous is deficient before the onset of hypertension. As the production of aqueous increases the tension rises as a consequence of limited accessibility of aqueous to the trabeculum.

### Goniotomy

Neither medical treatment nor the various antiglaucoma operations used in the adult have been successful in the child. On the other hand, goniotomy has served to normalize the tension in a large majority of the cases of congenital glaucoma. The incomplete opening of the filtration angle dictates the operation, the object of which is to complete the separation of the iris and ciliary body from the corneoscleral trabeculum. It is remarkable that in most cases it is necessary to open only a sector of the angle to normalize the tension. In a few cases it is necessary to open a second sector and rarely a third or fourth.

### Technic

The present technic of goniotomy is essentially that developed by Barkan.<sup>1</sup> The special instruments needed are the surgical contact lens and goniotomy knife, a binocular loupe and focal light. The loupe plus

contact lens yields a magnification of about 4 diameters which is sufficient for the maneuvers of the operation. Some operators prefer the operating microscope instead of the loupe. On the other hand in many cases the angle is seen better with the lower magnification on account of the cloudiness of the cornea. The corneal cloudiness can often, fortunately, be reduced to some degree by removing the corneal epithelium before the contact lens is applied.

The operation is begun by placing bridle sutures around the superior and inferior recti. By means of these sutures the eye is held steady by the assistant and is rotated so the 12:00 meridian of the right cornea is moved to the 10:00 position and the 6:00 meridian of the left cornea is moved to the 4:00 position. The reason for this rotation is to place the point of entrance of the knife in a temporal position for goniotomy at 6:00 for the right eye and 12:00 for the left. The corneas then can be rotated in the opposite direction if a second operation is necessary. The sector of the angle on both sides of 6:00 for the right eye and 12:00 for the left is chosen for the operation. The surgical contact lens is now applied to the cornea and the space beneath it filled with saline solution. The operation may be performed without the contact lens but the results are less certain. The head of the patient is turned in the direction opposite to the surgeon to prevent air from entering



FIG. 4. Diagram showing wound with sutures in place and course of needle for goniotomy.

the space beneath the lens and cornea. A second assistant holds a light at the surgeon's right temple directing the beam always toward the blade of the knife. The knife enters the anterior chamber through the limbus at 12:00, (now rotated) right eye and 6:00 left eye and passes over the

center of the pupil and penetrates the apparet membrane in the angle. With a scraping rather than a cutting motion, the blade moves a short distance to the right and as far as possible to the left. As the blade of the knife advances the iris is seen to fall backwards. It is important to avoid passing the knife into the ciliary body with its blood vessels. Finally the knife is withdrawn over the iris to avoid injury to the lens. At this time the aqueous is lost and the anterior chamber collapses.

In Barkan's operation no suturing of the wound is used and the anterior chamber cannot adequately be filled with air. It is, however, always reformed the next day. In

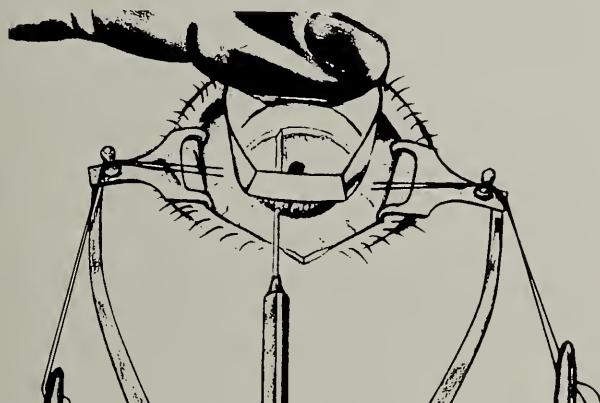


FIG. 5. Drawing showing goniotomy partially accomplished. Note iris having fallen backward in wake of goniotomy.

order to leave the anterior chamber reformed I have used the following method of closing the wound tightly. In suturing one must keep in mind the thinness of the cornea and sclera in these eyes. First the conjunctiva is incised at the limbus for about 6 mm. and retracted. A No. 5-0 silk suture stained with methylene blue is placed astride the limbus penetrating to about one-half the depth of the corneosclera. An *ab externo* incision 4 mm. in length is made between the point of entrance and the point of exit of this suture until it is cut. In this way the depth of the preliminary incision is judged and premature entrance into the anterior chamber is avoided. Now a No. 6-0 catgut suture is passed through the stained canal made by the track suture. The assistant everts the lips of the wound while the surgeon passes the goniotomy knife into the anterior chamber. At the completion of the operation, as the knife is withdrawn, the

assistant tightens the knot so that the anterior chamber is not lost. In this way peripheral anterior synechiae are avoided. Finally the conjunctiva is closed over the corneoscleral wound.

Recently I have used another modification of the technic of goniotomy suggested by Worst.<sup>6</sup> Instead of the goniotomy knife is a No. 21 gauge intravenous needle which is very sharp is used. It is connected to a bottle or syringe of saline solution. By raising or lowering the bottle or with the syringe the assistant can control the depth of the anterior chamber throughout the operation.

During the first two or three days after the operation the cornea may be slightly clouded but as the epithelium regenerates the cornea clears. The tension is tested under anesthesia in 2 or 3 weeks and if elevated a second goniotomy is done, opening the contiguous nasal sector of the angle. After the tension is normalized at the first check-up it is tested again under general anesthesia at 2 months, 6 months and 1 year.

#### Case Report

I present the following case which demonstrates well the pathogenesis and the anatomic and clinical results of goniotomy.

The patient was a 4 year old child. The mother had noticed clouding of the cornea since the age of 1 month with gradual enlargement of the eyes. The child's brother had congenital glaucoma and the father's eyes were reported to be large.

Under anesthesia the diameter of the cornea measured 14 mm. in the right eye and 13.5 mm. in the left eye. The tension was 30 in the right eye and 17 in the left, (Schiotz). The clouding of the right cornea was marked, making it impossible to see the angle. The left cornea showed only slight clouding in the periphery. The angle of this eye was well seen. The periphery of the iris or pigmented iris processes seemed to be plastered against the wall of the angle. The wall of the angle could be seen through narrow spaces between these processes.

Goniotomy was done without contact lens, due to the extreme clouding of the cornea, from 6:00 to 3:00. The tension remained normal until the 4th tonometry under anesthesia at 11 months when it measured 30 mm. (Schiotz). Goniotomy was therefore performed from 3:00-12:00. The tension then remained at 17 until the last testing in 1956, 2½ years after the final goniotomy on the right eye.

At this time the patient was 8 years old. The tension in the left eye, which had always been below 20, was now found to be 32. Consequently



FIG. 6. Section of angle of right eye before goniotomy.

goniotomy was performed. At the end of the operation the anesthetist announced that the heart had stopped beating. Despite intrathoracic massage of the heart the patient did not respond.

Microscopic examination of the eyes revealed the following condition of the angles: on the side of the angle of the right eye not operated upon the incomplete separation of the iris from the trabeculum is seen. On the side operated upon the operative separation of the iris from the trabeculum is seen. The opening of the angle of the left eye, obtained just before death, is seen.

The microscopic picture of these eyes together with the normalization of tension in the right eye for  $2\frac{1}{2}$  years demonstrates the cause of the hypertension and the remedy obtained. This case confirms the rationale of goniotomy for congenital glaucoma.

### Results

This report is based on 54 cases of congenital glaucoma operated upon by goniotomy. Four cases were eliminated for lack of complete data. Of the 50 eyes observed from one to 15 years after the last operation, the tension was made normal in 42. The tension of 8 eyes remained elevated above 24 mm. (Schiotz). The tension therefore became normal in 84% of eyes operated upon. In this series 66 operations were performed on 50 eyes. Several cases required goniotomies on two sectors of the angle. In one case four goniotomies were performed and in another five with finally a normal state of the tension.

### Comments

Congenital glaucoma is a rare disease of infants but it is of great importance to the ophthalmologist. The symptoms are usually manifest in the first months of life. The pathologic changes resulting from the increased intraocular pressure develop rapidly. Often the affected eyes will show profound clouding and enlargement of the eye in a period of two to three weeks. Therefore, the diagnosis and early surgical treatment is urgent before permanent pathological changes have taken place.

The pathogenesis of congenital glaucoma has been demonstrated in the works of Barkan,<sup>1</sup> Allen and associates,<sup>3</sup> Shaffer<sup>4</sup> and Maumenee.<sup>5</sup> The gonioscopic picture, the microscopic examination of the few available eyes at autopsy and the results of goniectomy are in agreement that the condition causing the hypertension is the obstruction of aqueous outflow produced by the incomplete separation of iris and ciliary body from the corneoscleral trabeculum.

Goniectomy is the operation indicated for congenital glaucoma because of its direct attack on the causative condition, its minimum of trauma and alteration of the anato-



FIG. 7. Section showing angle of anterior chamber of right eye  $2\frac{1}{2}$  years after goniotomy.

my of the eyes and above all for the high percentage of normalization of tension obtained.

### Summary

The pathologic and clinical manifestations of congenital glaucoma are presented together with a case report showing the long term and immediate results in eyes examined after death.



FIG. 8. Section of angle of anterior chamber of left eye after goniotomy performed immediately before death.

The technic of the operation developed by Barkan with modifications is detailed.

This report is based on a series of 50 eyes operated upon by goniotomy. The tension was normalized in 84% of the eyes.

**Acknowledgement.** A number of the pathologic slides presented in connection with this paper were used through the courtesy of Dr. A. E. Maumenee.

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## CASE REPORT

### THROMBOCYTOPENIC PURPURA ACCOMPANYING BRUCELLOSIS: A Case Report with Demonstration of a Granuloma in the Bone Marrow\*

Blair D. Erb, M.D., Jackson, Tenn.

A case of thrombocytopenic purpura associated with brucellosis is presented to re-emphasize the need for establishing a primary causative factor in thrombocytopenic purpura, and because of an interesting finding on bone marrow examination.

#### Case Report

This 39 year old white man was admitted to the Jackson-Madison County General Hospital on May 29 with a 5 day history of epistaxis. Four days before admission he had developed gross hematuria followed by development of petechiae on the lower extremities, trunk, and arms. Four months prior to admission the patient, a farmer, delivered twin calves bare-handed and carried them into the kitchen of his home to protect them from the cold weather. Both calves subsequently died of confirmed Bang's disease. Two other cattle on the farm died later of Bang's disease.

One month following this delivery he developed a "flu-like syndrome" manifested by fever, night sweats, fatigue, malaise, and headache which lasted for 2 to 3 weeks. The patient saw his physician at that time and was given symptomatic treatment. He continued to complain of malaise and easy fatigability from then until the admission to this hospital. The past history, family history, and personal history offered no further positive features.

Physical examination revealed a T. of 99.8° F., B.P. 154/100, and weight 148 lbs. He was well developed, well nourished and in no acute distress. The head, neck, eyes, ears, nose, and throat were not remarkable. Very small nontender cervical lymph nodes were present, but axillary and epitrochlear nodes were not palpable. Examination of the heart revealed a regular rhythm without significant murmurs; the lungs were clear. The abdominal examination revealed a palpable non-tender spleen under the left costal margin; the liver was not palpable. A diffuse petechial and purpuric eruption was present over the legs, thighs, and entire trunk. There were small petechiae on the arms.

The admission laboratory work revealed a HCT. of 44% with a Hgb. of 14.3 Gm. The total W.B.C. count was 7,350 per cu. mm. with 51% neutrophils, 37% lymphocytes, 5% monocytes, and 7% eosinophils. Peripheral blood smears upon admission showed a virtual absence of platelets.

The urine was reddish-brown, with a specific gravity of 1.024, 3+ albumin, and 40 to 50 W.B.C. per hpf. with innumerable RBC. The BUN. was 18 mg. per 100 ml. Urine culture showed no growth. Brucella agglutination was positive in a titer of 1:1280.

Aspirated sternal bone marrow demonstrated in the clot islands of bone marrow with increased cellularity of the usual erythroid and myeloid elements and a moderate increase in nonfunctioning megakaryocytes. Scattered throughout the marrow islands were small granulomatous aggregations composed of collections of rather large epithelioid cells but without definite giant cells. The scattered focal granulomas were of interest and are shown in figure 1.

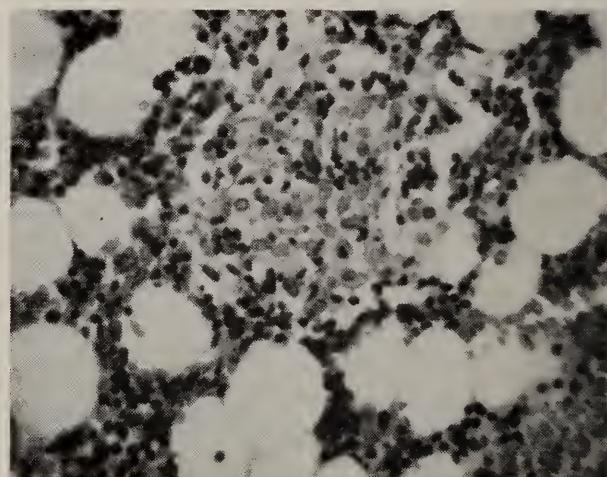


FIG. 1. Section of bone marrow demonstrating granuloma. (x 400).

Blood cultures and culture of the bone marrow aspirate were negative. X-ray films of the chest were not remarkable except for flattening of the diaphragms. An intravenous pyelogram demonstrated a small renal stone in the inferior calyceal group of the right kidney.

The patient was treated with methyl prednisolone, 4 mg. q.i.d. Thirty-six hours after methyl prednisolone was started, the report of the Brucella agglutination was returned and tetracycline phosphate, 500 mg. every 6 hr. was administered. The purpura had already improved when the tetracycline was started.

#### Discussion

The diagnosis of thrombocytopenic purpura rests on the demonstration of marked reduction or total absence of platelets. The bone marrow shows morphologic change in the megakaryocytes consisting primarily of an increase in number and immaturity with apparently reduced or normal platelet production. The primary advantage of a bone marrow examination is in ruling out an associated disease which may be responsible for the thrombocytopenia.<sup>1</sup>

\*From the Jackson Clinic, Jackson, Tenn.

As a dividend in this case, however, the marrow examination demonstrated small granulomatous aggregations of epithelioid cells. One other case of thrombocytopenic purpura due to brucellosis is known to have been reported in the American literature and granulomas were found in that bone marrow section.<sup>2</sup> Castañeda found 13 cases of thrombocytopenic purpura due to *Brucella melitensis* in Mexico, but granulomas were not present.<sup>3</sup> The scattered focal granulomas were presumably due to brucellosis.

The pathogenesis of thrombocytopenia has been controversial. Theories concerning thrombocytopenia such as hypersequestration of platelets in the spleen, suppression of platelet production by the spleen via a humoral factor, and/or auto-immune antibody effects upon platelets have been debated.<sup>4</sup> Other interesting reports show thrombocytopenia as a result of increased utilization of platelets as associated with the vasculitis of diseases of hypersensitivity<sup>5</sup> or in the depletion syndromes, such as the defibrillation syndrome.<sup>6</sup>

A review of 381 cases of thrombocytopenic purpura by Doan and associates<sup>7</sup> found underlying causes in 110 patients. Secondary or symptomatic thrombocytopenic purpura has been attributed to drugs and toxic agents (quinidine, sulfonamides, arsenicals, etc.), other hematologic disorders (leukemia, lymphomas, pernicious anemia, etc.), congestive splenomegaly, Gaucher's disease, infections, hypersensitivity states such as lupus erythematosus, and other causes.<sup>1</sup> The infectious diseases usually incriminated are those associated with splenomegaly, including tuberculosis, typhoid fever, infectious mononucleosis, scarlet fever, or malaria.

Splenic enlargement, more common in secondary thrombocytopenia may be a result of direct involvement of the organ.<sup>7</sup> From 30 to 50% of patients with brucellosis have been reported to have splenomegaly.<sup>8</sup> On the other hand, 58% of one group of patients with nonviral secondary thrombocytopenic purpura had splenomegaly as opposed to only 3% with idiopathic thrombocytopenic purpura.<sup>7</sup> In this group of patients with enlargement of the spleen were included such underlying diseases as tuberculosis, Boeck's sarcoid, and certain other

bacterial infections. In this situation it is difficult to decide whether the splenomegaly is simply a result of the underlying disease or if it is in some way related to production of the thrombocytopenic state.

On the other hand, demonstration of the importance of platelet antibodies in idiopathic thrombocytopenic purpura and their relationship to therapy has been produced by Harrington and Associates<sup>9</sup> and Tulis.<sup>10</sup> Demonstration of platelet antibodies was not attempted in this case. The rapid response (2 days) of the bleeding disorder in this case would suggest that the corticosteroids played a greater role than did the antibiotics which were not started until 36 hours after initiation of corticosteroid therapy. This implies that the purpura was relieved by steroid suppression of either an immune mechanism or by reduction of tissue and vascular inflammatory changes. The mechanism of action remains a matter of conjecture.

In addition to these considerations regarding pathogenesis of thrombocytopenic purpura, the change described in the bone marrow of this patient leads one to speculate about the direct effects upon bone marrow and their possible relationship to thrombocytopenia and brucellosis. The granulomas were not produced in sufficient number to have a myelophthisic effect. One must then consider that the thrombocytopenia in this case of brucellosis may have resulted from any one or several of many factors, including hypersequestration, auto-immune platelet antibody effect, and/or direct bone marrow changes.

### Summary

A case of thrombocytopenic purpura associated with brucellosis is described. Changes in the bone marrow with demonstration of a granuloma are presented. Although the cause is not immediately apparent, any one or several of many factors may be involved in the production of thrombocytopenia in brucellosis.

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#### **THE DIAGNOSIS OF PHEOCHROMOCYTOMA.**

**Moorhead, Caldwell, Kelly and Morales,  
J.A.M.A., 196; 1107, 1966.**

Despite availability of reliable screening tests for pheochromocytoma, the diagnosis too often is made by the pathologist. The authors reviewed a series of 26 cases at the Henry Ford Hospital. Age ranged from 18 to 69 years. Average duration of symptoms was 3 years. The duration of symptoms had no consistent relationship to the degree of secondary vascular damage or type of hypertension observed. Seventy percent of the patients had some type of paroxysmal attack; 50% gave a history of hypertension; 25% were normotensive at the time of the initial examination. The incidence of antemortem diagnosis was significantly higher in the patients presenting some type of paroxysmal attack.

Presenting complaints other than paroxysmal attacks, included excessive sweating, weakness, abdominal pain, chest pain frequently interpreted as angina, vasomotor phenomena, excessive nervousness, tension, or marked anxiety, and less often headache or abdominal mass.

Of the 26 cases, 13 patients had known hypertension, 4 had diabetes mellitus, and 4 a history of peptic ulcer. None of the authors' cases reported neurofibromatosis or a positive family history of pheochromocytoma.

Routine laboratory studies are rarely helpful in the diagnosis of pheochromocytoma. An impaired glucose tolerance was not uncommon. Abnormal electrocardiograms and elevated basal metabolic rates were not uncommon.

Histamine and phentolamine (Regitine) were the drugs used in pharmacologic testing:—the former if the basal blood pressure was below 170/110; the latter in those with a pressure over 170/110. Two false-negative responses to histamine occurred, each in patients with established diastolic hypertension. The average response to the histamine test was a rise in diastolic blood pressure of 50 mm. Hg. above the maximum cold

pressor response. In all cases, the dramatic pressor response to histamine was readily reversed by the intravenous injection of phentolamine.

The one false-negative reaction to the phentolamine test occurred in a patient with intermittent hypertension and congestive heart failure being treated with mercurial diuretics. The phenolamine test produced an average fall in diastolic pressure of 28 mm. Hg. 2 minutes after injection.

Urinary studies for catecholamines and the metabolites vanilmandelic acid (VMA) and methoxycatecholamines were positive in each of the cases so studied. In one of the patients whose tumor functioned paroxysmally, catecholamine and VMA levels were normal; however, the methoxycatecholamine concentration was abnormally high. Diagnosis in 56% of the cases was helped by IVP, 63% by retroperitoneal injection of carbon dioxide, 67% by angiogram and 25% by an aortogram.

The paroxysms produced by pheochromocytoma were often produced by reproducible stimuli—change in posture, exertion, trauma or massage, general anesthesia, alcohol, straining, propylthiouracil, corticotropin, smoking, and glucagon. The patient is characteristically weak and exhausted following the paroxysms.

Pheochromocytoma has become one of the "great imitators" of clinical medicine, resembling hyperthyroidism, malignant hypertension, diabetes mellitus, Cushing's syndrome, reactive hypoglycemia, coronary artery disease, severe headache, organic and functional gastrointestinal disorders. It should be emphasized that the most frequently seen clinical picture is indistinguishable from essential hypertension. Because of the nullifying effect most antihypertensive drugs have upon the validity of the various diagnostic tests alluded to, it is strongly recommended that such testing be done prior to the institution of therapy. (Abstracted for the Middle Tennessee Heart Association by Ben J. Alper, M.D., Nashville.)

## CLINICOPATHOLOGIC CONFERENCE

### Vanderbilt University Hospital\*

#### Congenital Heart Disease

This 7 lb. 14½ oz. white boy was delivered at Vanderbilt University Hospital at 10:25 P.M. on Dec. 8, 1959 to a 35 year old RH positive, (she had had 4 term pregnancies and 1 abortion), mother following an uncomplicated pregnancy. Delivery was spontaneous shortly after admission to the delivery room. The fetal heart tones were not checked. Cry and respirations were spontaneous. The child was taken to the Nursery, at which time he was noted to have dusky extremities.

Physical examination at that time showed a T. of 96.2 F., P. was 150. The baby was meconium stained. He had a vigorous cry. The lips were not cyanotic. The chest was clear to auscultation and no heart murmur was described. The remainder of examination was within normal limits.

The child seemed to do well after admission to the Nursery except for intermittent episodes of tachypnea with respirations up to 80 per min. A feeding tube was passed into the stomach without difficulty. On the morning of Dec. 9 the child was observed to have increasing tachypnea but the color remained satisfactory and physical examination was otherwise unchanged.

A chest x-ray was interpreted as follows: "Diffuse mottling in both lung fields is present with the picture suggesting aspiration and/or bronchopneumonia." Hgb. was 22.9 Gm.

Shortly thereafter the child appeared to be slightly dusky, was placed in an isolette, and was started on tetracycline by mouth. The child had progressive increase in the respiratory rate up to 96-116 per min. with grunting. He was placed in oxygen at 2:00 P.M. on Dec. 9 with moderate improvement. An EKG. showed the following: Rate 160, PR 0.10, QRS 0.05, QT 0.24, Axis 135°, P in Lead 2 "steeped" and = 2.5 mm., R in VI = 15 mm, S in VI = 1.5 mm, R in V6 = 1.5 mm, S in V6 = 3.5 mm. It was elected to digitalize the child with digoxin, 0.060 mg. per kg. By the afternoon of Dec. 9 the child had a gallop rhythm and an enlarging liver. He continued to be cyanotic in spite of oxygen, and at 7:00 A.M. on Dec. 10 was seen to be icteric and very irritable. Pulse rate at that time was 160. The blood showed baby O positive, Coomb's negative; the mother was O positive. Total serum bilirubin was 13.5 mg. and conjugated 0.6 mg. per 100 ml. Serum Ca was 4.5 mg. per 100 ml. Because of the possibility of sepsis, a blood culture was made, and penicillin 400,000 units every 4 hours intramuscularly

was started, as well as chloramphenicol 30 mg. every 8 hours intramuscularly and calcium gluconate 90 mg. orally every 6 hours. During the day of Dec. 10, a second chest film showed some clearing of the lung fields and enlargement of the liver.

The child had a progressive downhill course with increasing cyanosis, and in spite of oxygen, digitalis, the intracardiac use of epinephrine, the child died at 8:15 P.M. on Dec. 10. Serum K obtained shortly before death was 9.6 mEq/L.

**DR. ROBERT FRANKS:** An attempt to establish the correct diagnosis for the patient in the protocol presented today entails, in essence, a differential diagnosis of causes of the syndrome of respiratory distress in newborn infants.

Several potential causes can be excluded by information contained in the first paragraph of this protocol.

The intermittent tachypnea manifested by this infant is not characteristic of certain types of obstruction of the upper respiratory tract, such as laryngeal web (or stenosis), or bilateral vocal cord paralysis. In the presence of such conditions, early, severe and persistent respiratory distress would be expected. Bilateral choanal atresia may be associated with intermittent respiratory distress—the distress increasing when the mouth is closed, such as in attempts at feeding, and decreasing when the mouth is held open, such as with crying. As indicated in the protocol, the catheter was passed into the stomach without difficulty. This almost certainly implies passage through a nostril into the posterior pharynx, esophagus and stomach. Therefore bilateral atresia can be excluded with a high degree of assurance. In addition, the passage of the catheter into the stomach excludes another cause of respiratory distress, i.e., tracheo-esophageal fistula, of the most common type. With this abnormality there is proximal esophageal atresia and secretions which pool in the posterior pharynx are aspirated, giving rise to aspiration pneumonitis and respiratory distress.

In any discussion of respiratory distress in the newborn period, hyaline membrane disease must be strongly considered. This condition is seen most commonly in premature infants, off-spring of diabetic mothers, and in infants delivered by cesarean section. The infant in this protocol was the product of an uncomplicated pregnancy and

\*From the Departments of Pathology and Pediatrics, Vanderbilt University School of Medicine, Nashville, Tenn.

spontaneous delivery, and had a birth weight of almost 8 pounds. In addition, to these factors, the intermittency of the tachypnea without mention of retractions or grunting is, again, not characteristic of the disease. Respiratory distress secondary to aspiration of meconium appears to be a strong possibility in this infant. The child had evidence of fetal distress, with passage of meconium in utero; postnatally this was reflected in meconium staining of the skin. Infants who are depressed secondary to maternal sedation and have absence of spontaneous cry and respirations are prone to develop aspiration of meconium. As noted, such was not the case in this infant.

At any rate, because of increasing tachypnea a chest film was obtained at 12 hours of age and interpreted as demonstrating "diffuse mottling in both lung fields with a picture suggesting aspiration and/or bronchopneumonia." This is not the classically described "reticulogranular pattern" of hyaline membrane disease but must be considered as compatible with either this or aspiration of meconium. In relation to the chest film, however, it is possible to exclude some further potential causes of the syndrome of respiratory distress. Unilateral pulmonary agenesis, lobar atelectasis, lobar emphysema and diaphragmatic hernia might all be expected to give a suspicious if not pathognomonic radiographic picture.

As appears in the protocol, progressive respiratory distress was noticed subsequently and grunting respirations became apparent. I have asked Dr. Frank Puyau to interpret for me the EKG findings outlined in the protocol. It is his opinion that the primary abnormality rests in the P waves, described in lead 2. Other than this, the findings are compatible with those of a normal newborn infant. Found slightly later was a serum calcium of 4.5 mg.

I might digress for a moment on this point. There are certain groups of infants who seem more prone to the development of neonatal hypocalcemia. These include, again, the offspring of diabetic mothers, the offspring of mothers with toxemia, the extremely rare child whose mother has hyperparathyroidism, infants who have severe cerebral anoxia with intracranial bleeding, and children with hyaline membrane dis-

ease in whom the hypocalcemia may be asymptomatic, as it was in this infant. I am not able to relate hypocalcemia to the pathogenesis of this child's illness and will therefore ignore it for the time being.

As was recorded on the second day of life a second chest film showed some clearing of the lung fields and an enlarging liver. (Interpretation of the x-rays by Dr. Henry Burko.)

Subsequently the child's course progressively deteriorated in spite of various therapeutic measures and died.

During the second day of life, the infant had tachycardia, cyanosis with increasing respiratory distress, hepatomegaly, a gallop rhythm and abnormal P waves on the electrocardiogram. The child certainly appeared at this point to have had congestive failure and, as is frequently the case, it was necessary to differentiate cardiac failure associated with pulmonary disease and acute cor pulmonale from that associated with primary cardiac disease.

In this regard I believe it significant that at 30 to 40 hours of age, at the time of the second chest film, there was worsening of the clinical symptoms with signs of cardiac failure, in the face of improvement of the pulmonary infiltrates seen radiographically. We will see shortly if that observation is a valid one regarding the differentiation of primary pulmonary from primary cardiac disease in the genesis of this infant's death.

No murmur was heard throughout hospitalization but as many as 20% of children dying in the first month of life with congenital heart disease have no murmur. Because of the evidences of improvement of pulmonary lesions and the simultaneous worsening of the clinical condition associated with evidences of cardiac failure, I believe—in spite of the absence of a murmur—that this infant had primary cardiac disease.

I can make no sophisticated comments regarding the type defects which might cause this. In the neonatal period the most common cause of death associated with primary heart disease is the "hypoplastic left heart syndrome"; transposition of the great vessels is a close second. Cardiomegaly is expected in both of these. The chest films were interpreted initially as showing no

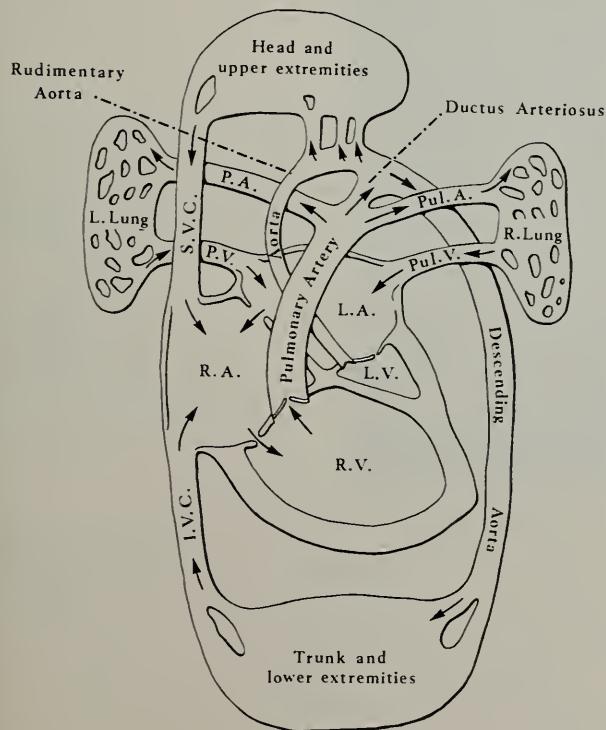
cardiomegaly, and infradiaphragmatic total anomalous pulmonary venous return must be suspected as a cause of congenital failure without associated cardiomegaly. However, as Dr. Burko has just pointed out, there probably is cardiac enlargement visible on these x-rays.

Final diagnoses: (1) Meconium aspiration; (2) Congestive failure secondary to congenital heart disease, probably the "hypoplastic left heart syndrome."

DR. JOHN SHAPIRO: I continue to be amazed, and almost incredulous, at the accuracy of approach of our pediatricians to the basic problem with what seems to me to be oftentimes a minimal amount of information. Suffice it to say that Dr. Franks has not only given, as desired, the differential diagnosis of the respiratory distress of the newborn but has come to a conclusion which is entirely accurate as far as the autopsy findings can be interpreted.

External examination was not revealing—some discoloration of the skin was attributed to either jaundice or meconium staining. Internally the liver edge was down some 5 cm. as a result of passive congestion but there was a minimal collection of fluid in the serosal lined cavities—the situation commonly present in cardiac failure in infancy.

The heart appeared moderately enlarged



*in situ* with predominance of the right auricle. For clarification of the findings in the heart and great vessels, the schematic illustration shown in figure 1 is helpful. The pulmonary artery arose in its usual location but was approximately two times the normal size. There was a large patent ductus arteriosus in direct continuity with the stream of the pulmonary artery. The pulmonary artery, patent ductus, and descending aorta formed a curving trunk which passed to the left of the vertebral column and descended in the usual manner. The ascending aorta from its origin to the insertion of the ductus arteriosus was hypoplastic and only some 3 mm. in diameter. The major branches of the ascending aorta and the aortic arch occurred in the usual locations. Both the superior and inferior vena cava emptied normally into the enlarged right atrium. The left atrium appeared to be approximately one-third to one-fourth of its normal size. It accepted the entire pulmonary venous inflow. There was a patent foramen ovale of large size. The tricuspid valve was normally formed and appeared competent. The right ventricular cavity was extremely enlarged and appeared to account for some 90 to 95% of the ventricular volume. The pulmonary valve was normally formed and appeared competent. The interventricular septum was intact. The mitral valve was extremely small but presented a crude representation of its normal structure. The unopened mitral valve would admit a 3 mm. probe. The left ventricular cavity was extremely small with its estimated volume no more than 5 cc. The aortic valve was very small, admitting only a 3 mm. probe. The valve cusps appeared normally formed and the coronary ostia occurred in the usual location. The aorta past the point of hypoplasia as described above showed no abnormality and was of approximately normal size.

Thus, transferring these anatomic findings to the functional state, the pulmonary venous return apparently entered the left atrium and in large part passed through the patent interauricular foramen where it mixed with the peripheral venous blood. This mixture then went through the right ventricle to the pulmonary artery where a portion of it entered the aorta by

way of the patent ductus arteriosus. There has been much speculation about the embryologic mechanism whereby such anomalies as we have described in the present case occur, but there is no certainty as to either the basic cause for occurrence of the defect or an entirely satisfactory explanation for the mechanism of its embryogenesis.

No other abnormalities were demonstrated at the time of autopsy. The lungs were

severely congested, and, on microscopic examination, appeared to be the site of an early acute pneumonitis.

*Final Anatomic Diagnoses.* (1) Hypoplasia of ascending aorta, left ventricle, and mitral and aortic valves with large patent ductus arteriosus and patent foramen ovale; (2) Severe pulmonary hemorrhage, congestion and edema secondary to above listed anomalies; (3) Early acute pneumonitis.



**11:47 pm**

**11:53 pm**

**12:06 am**

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From the  
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# THE MEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### SUMMARY OF TMA BOARD OF TRUSTEES ACTIONS—JULY 10, 1966

#### Committee On Scientific Work Reconstituted

#### New Format For 1967 Annual Meeting

#### Committee On Publications Named

#### Annual Meeting Dates —1968 and 1969

#### Physician Billing Procedure

- Upon recommendation of the Long-Range Planning Committee, the Board revised the composition of the Committee on Scientific Work for 1966-67. The committee's task primarily is the development of the annual meeting scientific program. Dr. R. H. Kampmeier, Nashville, was named Chairman. Other members of the committee are: Drs. Addison B. Scoville, Nashville; John H. Burkhart, Knoxville; Guy M. Francis, Chattanooga; and Robert M. Miles, Memphis.
- The days of the week in which the annual meeting will begin and end were changed and the following format was approved by the Board of Trustees for 1967.

#### Thursday, April 13

- Afternoon — First Session, House of Delegates  
— Specialty Society Meetings

#### Friday, April 14

- Morning — TMA Presentation (With no conflicting meetings)  
Noon — Open for Luncheons  
Afternoon — Specialty Society Meetings  
Evening — Specialty Society Banquets

#### Saturday, April 15

- Morning — TMA Presentation (With no conflicting meetings)  
Noon — Specialty Society Luncheons  
Afternoon — Specialty Society Meetings  
— Second Session, House of Delegates  
Evening — President's Banquet

The Board of Trustees meeting will be held on Sunday morning, April 16th. TMA presentations in the mornings will consist of scientific and socio-economic sessions and it was determined that no specialty society sessions should be scheduled to conflict with TMA'S presentations.

- The Board established a Committee on Publications to serve as the committee dealing with the functional problems of the Journal. The committee consists of Dr. Addison B. Scoville, Nashville, Chairman; Dr. James M. Hudgins, Nashville; Dr. W. E. French, Memphis; with the editor and the Executive Director of TMA serving as ex-officio members.
- In order not to conflict with Easter, the Board approved the dates of April 4-7 for the 1968 annual meeting in Chattanooga. Also, the dates of April 10-13 for the 1969 meeting were approved, with the location of the meeting yet to be determined.

- The Board studied many reports and resolutions submitted to the AMA House of Delegates on the subject of physician billing and found that there are many advantages that will accrue to the physician by using the direct billing method. The physician is an independent agent who can choose his method of payment, whether by assignment or by direct billing. It was brought to the attention of the Board that TMA

could not direct a physician to follow any one method of billing, but members could be urged to study carefully the mechanisms available for compensating physicians and encouraged insofar as possible to advocate direct billing and not elect to employ the assignment method, unless the physician found it most feasible to do so.

The Board took action by approving the principle of individual responsibility and encourages the TMA membership insofar as feasible to use the direct billing method.

## Other Actions

- —Approved six \$100 honorariums for guest speakers at the 1967 annual meeting . . . Heard a report from the Long-Range Planning Committee relative to consideration of a feasibility report on the TMA headquarters building concerning expansion. No action was taken . . . Approved a loan for additional financing of the TMA Student Education Fund . . . Heard a complete report and discussion from the President, Dr. Hubbard; the President-Elect, Dr. Kressenberg; and Chairman of the Committee on Governmental Medical Services, Dr. Nesbitt, with relation to the implementation of Title XIX and the appointment of a carrier for co-insurance and deductibles under Title XVIII of Medicare . . . Approved a plaque appropriately inscribed for presentation to Dr. J. Malcolm Aste, Memphis, in recognition of his service in behalf of TMA as Speaker of the House of Delegates for the past four years . . . Reaffirmed appointment of Dunn, Lemly, Sizer, Inc. as administrator for the TMA Group Life Insurance Plan . . . Appointed Dr. James C. Gardner, Nashville, Chairman of TMA's Committee on Rehabilitation, to attend a conference of the AMA on Rehabilitation on September 8-9, 1966 . . . Approved the second quarter financial statement for 1966 . . . Discussed the tax assessment on TMA property by the Metropolitan Government of Nashville . . . Referred to TMA attorney, to study the New Jersey Ruling concerning the handling of malpractice claims . . . Invited the Chairman of the Board of Directors and the Executive Vice-President of the National Association of Blue Shield Plans to meet with the Board of Trustees in October . . . Heard a summary report of the actions of the House of Delegates of the American Medical Association, June 26-30 meeting.

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## Medicare Patients Should Know

- Even with those patients who seem to understand the Medicare benefit structure, physicians may want to clarify the limitations of the program to avoid future misunderstanding.

The physician should be concerned that his Medicare patients understand that the medical insurance portion of the program does not pay for:

1. The first \$50 yearly of covered expenses.
2. 20% of the determined "reasonable" charge.
3. Any portion of the doctor's fee which may exceed the determined "reasonable" charge.

Among services not covered by Medicare are routine physical checkups; eye examinations for refractive error only; hearing examinations for hearing aids; and drugs and biologicals, except when provided as part of a physician's service, and then only if they cannot be self-administered.

## AMPAC Memberships

## From Tennessee Medicare Book

- As of July 1, 1966, the American Medical Political Action Committee reported 683 members from Tennessee.

- A ninety-six page, paper-back book, dealing with aspects of Medicare which affect the physician has been mailed to the Nation's physicians by AMA. The book, entitled "Medicare and the Physician: Questions and Answers on P.L. 89-97" was taken from the special section on Medicare which was published in the June 20th edition of the AMA NEWS. Keep the booklet handy as it will be helpful to you with your Medicare patients.

# Public Service

THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

**2nd Mental Health  
Congress Oct. 12-13**

- The Tennessee Medical Association, the Woman's Auxiliary to the Tennessee Medical Association and the Tennessee Mental Health Association will co-sponsor the Second Tennessee Congress on Mental Illness and Health October 12 and 13 in Nashville.

Headquarters for the meeting will be the Hermitage Hotel with general sessions being conducted in the War Memorial Auditorium adjacent to the downtown hotel.

Dr. Frank H. Luton, chairman of the TMA Mental Health Committee and of the Congress Planning Committee, outlined the purposes of the meeting as follows:

"Justification for a Second Tennessee Congress may well be based on the premise that much remains to be done. Education of all mental health persons remains at the forefront, new emphasis on special problems and needs have occurred. We, therefore, propose in this Second Congress: (1) To bring together persons confronted by similar problems, for talking together. (2) To present psychiatric information about health topics of broad national, state and hamlet concern, by speakers of unusual ability. Medical practice is now, more than ever before, concerned with keeping abreast of such new developments. (3) To bring up-to-date the facts of state planning for the care and treatment of mental illness, and to consider means of moving toward the prevention of mental illness. (4) To hear some reports of progress on (a) new mental health laws, (b) new educational programs, and (c) development of comprehensive mental health centers. (5) Finally, to consider, what are the hopes for the future?"

The First Tennessee Congress, conducted in the Fall of 1963, attracted just under 500 interested persons. Considerably more people are expected to attend this Congress.

Outstanding speakers from across the nation are scheduled to appear on the program. Dr. Dana L. Farnsworth of Cambridge, Mass., a member of the AMA Council on Mental Health, will deliver Wednesday's opening address and Dr. Charles L. Hudson, of Cleveland, Ohio, president of the American Medical Association, will be the banquet speaker that evening.

Highlight of each day of the meeting will be two discussion groups, each with eight topics to be considered. Wednesday's afternoon discussion group will be entitled "Acute Psychiatric Emergencies" with suicide prevention, problems among school-age children and the utilization of other mental health disciplines in treatment of the mentally ill among the subjects to be discussed.

Thursday will feature eight breakfast roundtable discussion groups with treatment of the emotionally disturbed in a community hospital, sex education in school, church and home and the general practitioner treating the emotionally disturbed as some of the topics of discussion.

A total of 37 people are scheduled to appear on the program, including Governor Frank G. Clement. The complete program appears elsewhere in this issue of the JOURNAL.

Every TMA member is urged to attend this outstanding meeting.

## **Cleveland is Site of Fourth Annual Rural Health Conference**

- The fourth Tennessee Rural Health Conference will be held in Cleveland, Tennessee at the Holiday Inn October 19, 1966. The one-day meeting is co-sponsored annually by the Tennessee Medical Association, the Tennessee Farm Bureau Federation and the University of Tennessee Agricultural Extension Service.

A presentation on Quackery by Mr. Robert A. Youngerman, Secretary of the AMA Committee on Quackery, will be a highlight of the morning session. Mr. Lonnie Safley, assistant to the president of the Tennessee Farm Bureau, will discuss "The Farmer's Interest in Rural Health Programs" and Dr. John H. Saffold, president of the Tennessee Academy of General Practice, will deliver an address entitled "What's Being Done to Encourage Physicians to Practice in Rural Areas."

After a luncheon hosted by TMA, Dr. Robert F. Lash of Knoxville will give a presentation on "Poisons" and Mr. Whalen M. Strobar, AMA Field Representative, will discuss "The Effect of Medicare to Date" during the afternoon session. Dean Webster Pendergrass, of the U.T. College of Agriculture, will give a summation of the meeting to close the conference.

All physicians in the Chattanooga and surrounding areas interested in Rural Health are being urged to attend. Dr. Julian C. Lentz, Jr., of Maryville, is chairman of the TMA Rural Health Committee.

- The annual Community Health Week observance is set for the week of October 16-22 across Tennessee and the nation.

Each of the 49 county medical societies in Tennessee has received a kit of promotional materials from AMA to aid them in developing a program suitable for their community. Dr. O. Morse Kochtitzky, chairman of the TMA Communications and Public Service Committee, has requested each county society president to appoint a Community Health Week Committee to expedite this excellent PR project.

The continuing theme of the observance is "Teaming Up For Better Health". Primary objectives are to stimulate greater public awareness and appreciation of the wealth of health facilities and services which are available at the community level and to stress the health progress and medical advances which have been made locally through the united efforts of all members of the community health team.

Other health organizations are being urged to join with the medical profession and to participate actively in the promotion.

- Drs. William H. Edwards and O. Morse Kochtitzky, chairmen of TMA's Interprofessional Liaison Committee and Communications and Public Service Committee respectively, have written to each practicing attorney in the State of Tennessee calling attention to cultist therapy as criminal negligence.

A reprint from the Journal of the American Medical Association citing recent cases of cultist practices that resulted in criminal proceedings was also included with the communication. The reprint on law and medicine described several cases involving the cult of chiropractic that have been tried in the courts.

The attorneys were informed that doctors of medicine oppose chiropractic and other cultist practices, not because of any fear of competition, but from the desire to protect the public from the hazards of such practices.

The AMA encourages all physicians to urge their patients who have been victimized by cultist practices to make complaints to law enforcement officers.

## **Plans Being Made For Community Health Week**

## **Attorneys Informed of Cultist Therapy as Criminal Negligence**

**Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.**

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DEXTRORPHETAMINE SULFATE (15 mg.) SUSTAINED RELEASE CAPSULES WITH MEPROBAMATE (300 mg.)

**to help establish  
a new dietary pattern**

**Contraindications:** Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

**Precautions:** Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

**Side Effects:** Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneuritic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vaso-motor and respiratory collapse.



**LEDERLE LABORATORIES**  
A Division of American Cyanamid Company,  
Pearl River, New York

# President's Page

## Are You Encouraging Your Son To Study Medicine?



DR. HUBBARD

What is the future of medicine in our Country? If you had it to do over again, would you study medicine? If you were just graduating from Medical School, would it be private practice, academic medicine or possibly join the Government Medical Services?

For medicine in the United States to advance in the next decade as it has in the last, it will be essential for us to have not only the highest quality of students that we now have, but we will urgently require increased numbers of students. For adequate care of the population, quality and quantity of the physicians will not suffice. There must be an effectual distribution.

Why does one study medicine? It is so simple when you reduce it to the basic reason. The indemnification and rewards to that individual through the field of medicine are brighter and more attractive than any other vocation. When one speaks of compensation and rewards, he implies many things. To obtain happiness and contentment in one's vocation, first it is necessary that he be adequately remunerated financially for his time and effort. He must get "kicks" out of service to humanity. It is my feeling the physician's number one desire is to administer to the unfortunate people who need his services. The financial returns are secondary. We have been fortunate in the last twenty years, and in our efforts of caring for patients, we have been sufficiently remunerated monetarily.

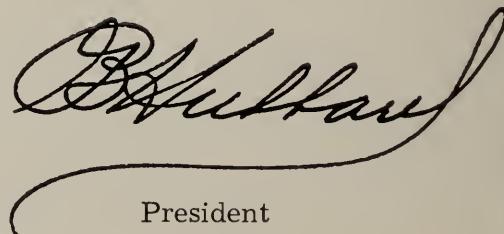
There are so many interferences now in trying to practice medicine that one spends at least fifty percent of his time on red tape due to Federal Government infringements. The more Fedicare we have, the quality and quantity of physicians will decrease. Physicians cannot be bought financially. The more intrusions, interventions and encroachment on medicine by the Federal government, the less attractive is the study of medicine. The financial reimbursement becomes a minor item compared to the freedom of practice.

It has been said that physicians in private practice, not connected with teaching institutions in countries that have socialized medicine, are second class physicians. Do we want this? Is this what Congress wants?

The Federal Government should know and understand that as they intervene and interfere, there will be less and less first class students that will study medicine because of its unattractiveness. This is one of the main reasons medicine is inferior under socialism.

I must weigh the many compensations of being a physician against the disagreeable infringements, interferences, and intrusions described above, and in this balance, see whether the rewards are still worthwhile enough to encourage my son to study medicine.

Medicine has advanced under a free enterprise system of individual physician responsibility. I hope and pray the Federal Government will allow us to continue under this regime and not bring more Fedicare to further break up the traditional physician-patient relationship.



President

# THE JOURNAL

OF THE  
TENNESSEE MEDICAL ASSOCIATION

Published Monthly

Devoted to the Interests of the Medical Profession of Tennessee

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SEPTEMBER, 1966

## EDITORIAL

### SECOND TENNESSEE CONGRESS FOR MENTAL ILLNESS AND HEALTH

Next month TMA will again sponsor, in collaboration with the State's Department of Mental Health and the Tennessee Mental Health Association, its second congress to be devoted to some of the many facets of this major medical problem.

A decade ago under an act of Congress a Joint Commission on Mental Health was established to evaluate the needs and resources for the mentally ill of this Country and to make recommendations for a national health program. The American Medical Association, the American Psychiatric Association, with representatives of other organizations made the study which was reported in 1961.

The AMA quickly backed this up by calling its First National Congress on Mental Illness and Health in Chicago in 1962. It was attended by 2,000 invited participants from the medical profession, allied health groups, lawyers, educators, state and gov-

ernment agencies, and citizens' groups. Its success stimulated a second AMA congress in November of 1964, whose theme was "Community Mental Health Services and Resources—Mobilization and Orientation."

From the first AMA congress came the recommendation that state medical associations embark on similar programs to focus attention locally upon the problems in mental health which face our citizens, and especially our profession which in the final analysis carries the responsibilities of diagnosis and management, whether in the hospital, the clinic, the office, or within the family circle, as well as for decisions on rehabilitation and the patient's return to community life. TMA was one of the first half dozen or so states which accepted the challenge and held its first Tennessee Congress in the fall of 1963. It had a highly satisfactory attendance of 438 registrants, among whom were 92 physicians, the remainder being representatives of hospitals, the nursing profession, civic, church, and mental health groups, and psychologists.

Every doctor's experiences involve many areas of disability and illness which stem from either mental illness or mental health. What doctor does not need to face and do something about mental retardation, emotional problems in children, the juvenile delinquent, the alcoholic (the "nation's number one health problem" as often defined), the over-use and abuse of drugs—whether tranquilizers, barbiturates, amphetamines, or LSD,—mental health in industry, and the readjustments to be made by the retired person whose somatic complaints, as well as the mental illnesses of the aged, fall under the umbrella of Medicare.

Added to this is the responsibility of the medical profession to cooperate with our state institutions in the rehabilitation of our citizens who have been discharged to resume life in the community and need psychotherapeutic support and supervision of drug therapy to avoid relapse and readmission to a mental institution at every taxpayer's expense. This matter is no different than the responsibilities of the doctor for the supervision of maintenance therapy of other chronic diseases, whether

## SECOND TENNESSEE CONGRESS ON MENTAL ILLNESS AND HEALTH

October 12-13, 1966—Hermitage Hotel—Nashville, Tennessee  
PRELIMINARY PROGRAM

### Wednesday, October 12, 1966

- 8:30 A.M.—Registration: Hermitage Hotel Lobby
- 10:30 A.M.—General Session: War Memorial Auditorium  
 Welcome—The Honorable Frank G. Clement, Governor, State of Tennessee  
 Response—G. Baker Hubbard, M.D., President, Tennessee Medical Association  
 Opening Address—Dana L. Farnsworth, M.D., AMA Council on Mental Health
- 2:00 P.M.—Discussion Groups:  
 Group I: "Suicide Prevention"—Kenneth J. Munden, M.D., Leader  
 Group II: "Gastrointestinal Disorder"—Joseph B. Kirsner, M.D., Leader  
 Group III: "Headaches" — Bertram E. Sprofkin, M.D., Leader  
 Group IV: "High Blood Pressure"—John Thomas, M.D., Leader  
 Group V: "Problems Among School Age Children"—Luthor A. Beazley, Jr., M.D., Leader  
 Group VI: "Psychotherapy by the Non-Psychiatric Physician"—M. Ralph Kaufman, M.D., Leader  
 Group VII: "Utilization of Other Mental Health Disciplines in the Treatment of the Mentally Ill"—Robert Reiff, Ph.D., Leader  
 Group VIII: "Development and Organization of a Comprehensive Mental Health Center"—(Leader to be announced)
- 6:00 P.M.—Social Hour and Banquet: Hermitage Hotel  
 Toastmaster—Joseph W. Johnson, Jr., M.D., Chattanooga  
 Address—Charles L. Hudson, M.D., President, American Medical Association

### Thursday, October 13, 1966

- 8:00 A.M.—Breakfast Roundtable Discussion Groups—  
 Group I: "Religion and Health"—Paul B. McCleave, LL.D., Leader  
 Group II: "The General Practitioner Treating the Emotionally Disturbed"—William F. Sheeley, M.D., Leader  
 Group III: "The Mildly Retarded"—George Tarjan, M.D., Leader  
 Group IV: "Adolescent Emotional Problems"—James N. Sussex, M.D., Leader  
 Group V: "The Law and Mental Health"—Gene L. Usdin, M.D., Leader  
 Group VI: "Treatment of the Emotionally Disturbed in a Community Hospital"—Milton Greenblatt, M.D., Leader  
 Group VII: "Family Mental Health"—William Moynihan, M.S.W., Leader  
 Group VIII: "Sex Education in School, Church and Home"—David M. Reed, Ph.D., Leader
- 11:00 A.M.—Panel Discussion: "Community Problems—Rehabilitation of Former Mental Patients"—War Memorial Auditorium  
 Moderator: Garabed H. Aivazian, M.D.  
 Panelists: M. Ralph Kaufman, M.D.  
 James N. Sussex, M.D.  
 Milton Greenblatt, M.D.  
 George Tarjan, M.D.
- 2:00 P.M.—Panel Discussion: "Drugs"—War Memorial Auditorium  
 Moderator: (to be announced)  
 Panelists: "Narcotics Agent"—Ambrose R. Ross, Tenn. Bureau of Investigation  
 "Physiology of Alcoholism"—Eddie C. Hoff, M.D.  
 "Psychopharmacologic Research"—Fridolin Sulser, M.D.,  
 "Psychiatric Treatment of Addictive Problems"—Robert Rasor, M.D.
- 3:30 P.M.—Summary of the Congress and Adjournment—William F. Sheeley, M.D., Superintendent, Arizona State Hospital, Tucson, Arizona

with insulin, digitalis, anticoagulants, or "antirheumatic drugs." Many doctors feel insecure in this area of medical practice, "pass the buck" if at all possible, and, if they assume responsibility, it is without enthusiasm. If the practicing physician persists in side-stepping his responsibilities in the area of mental disease and health, he may be assured others will "take over."

We cannot deny that legislation is moving medical care from a matter of personal interest and desire into the category of a public commodity with, in our opinion, a degree of sacrifice of that most important psychotherapeutic asset—the doctor-patient relationship. Yet, paradoxically, the citizenry will demand from government evidence of progress in mental health by one means or another as it is shocked by such recent events as mass murder, and the ever present problems of suicide, alcoholism, sex crimes, and juvenile destructiveness and negativism. Even more than the physical manifestations of disease, mental illness and health give point to the comment by the medical historian, Henry Sigerest, some four decades ago, before the recent rash of medical legislation, that "Medicine is above all, a *social science* that uses methods of the natural sciences—more than just a relationship between a sick person and his physician. Medicine is, above all, the way to improve the health and welfare of nations, the happiness of peoples, and with it peace among nations." (Quoted by Felix Martínez Ibanez)

Though most doctors will have neither the inclination nor the time to attend the Second Tennessee Congress for Mental Illness and Health, the officers of TMA wish its members to know of the Association's interest and sense of obligation in this area of medical practice and in the well-being of Tennessee's citizens.

R. H. K

## DEATHS

**Dr. James Edward Johnson**, 56, Chattanooga, died July 19th in a local hospital.

**Dr. Thomas E. Taylor**, 78, Chattanooga, died July 6th at his home.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

### Nashville Academy of Medicine Davidson County Medical Society

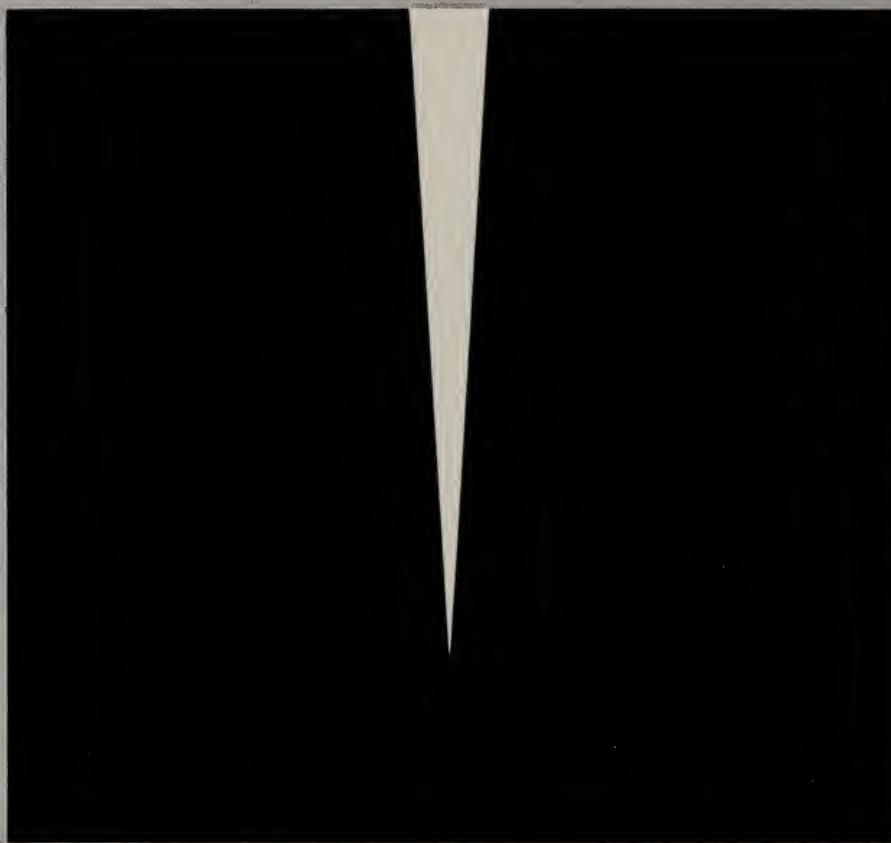
Dr. Robert G. Petersdorf, chairman of the Department of Medicine at the University of Washington School of Medicine, Seattle, discussed "What's New in Antibiotic Therapy," at the Nashville Academy of Medicine's September 13 dinner meeting, held at the VA Hospital. Dr. William F. Meacham, president, presided.

Business included the election of two nominating committees to select candidates for 1967 officers and delegates to the TMA House.

For the eleventh consecutive year, the Academy has arranged for doctors to assist in preventing and caring for football injuries this fall. Fifty members have volunteered to attend the 160 high school football games scheduled in Davidson County by 30 local teams. Fitness examinations will be done by private practitioners and the Metro Health Department. Nashville junior and senior high school coaches have been furnished with pertinent informational material by the Academy of Medicine to guide them in conditioning, training and maintaining the fitness of athletes. Included were the seven AMA booklets, "Tips on Athletic Training"; "A Guide for Medical Evaluation of Candidates for School Sports"; and "Safeguarding the Health of the Athlete."

### Memphis-Shelby County Medical Society

The August 2nd meeting of the Society was held in the auditorium of the Institute of Pathology. The program entitled "Legislative Know-How At The State Level" was presented by Ex-State Senator, Mr. John S. Wilder, Attorney-at-law, Somerville, and Ex-State Senator, Mr. John C. Chisolm, Mayor of Brighton. Mr. Wilder's presentation was entitled "The Importance of the Medical Profession Knowing Their Legislators." Mr. Chisolm discussed "The Effectiveness of a Lobbyist" and "The Characteristics of a Good Lobbyist."



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And 'Stelazine' offers additional benefits. Dependence has not been reported. At low doses, side effects are minimal. Its b.i.d. dosage is convenient and economical.

### Stelazine® brand of trifluoperazine

The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*. **Contraindications:** Comatose or greatly depressed states due to C.N.S. depressants and in cases of existing blood dyscrasias, bone marrow depression and liver damage. **Precautions:** Use with caution in angina patients and in patients with impaired cardiovascular systems. Antiemetic effect may mask symptoms of other disorders. An additive depressant effect is possible when used with other C.N.S. depressants. Prolonged administration of high doses may result in accumulative effects with severe C.N.S. or vasomotor symptoms. Use in pregnant patients only when necessary for the patient's welfare. **Side Effects:** Occasional cases of mild drowsiness, dizziness, mild skin reactions, dry mouth, insomnia and amenorrhea. Neuromuscular (extrapyramidal) reactions (motor restlessness, dystonias, pseudo-parkinsonism) may occur and, in rare instances, may persist. In addition, muscular weakness, anorexia, rash, lactation, hypotension, and blurred vision have been observed. Blood dyscrasias and cholestatic jaundice have been extremely rare.

For a comprehensive presentation of 'Stelazine' prescribing information and side effects reported with phenothiazine derivatives, please refer to SK&F literature or *PDR*.



Smith Kline & French Laboratories, Philadelphia

## Knoxville Academy of Medicine

A panel discussion on "Disability Evaluation Under Social Security" was presented at the meeting of the Academy on August 9th. Panel members from the Disability Determination Section of the Division of Vocational Rehabilitation, State of Tennessee, were Mr. Herbert L. Brown, Mr. David P. Seely, and Dr. James P. Lester.

## NATIONAL NEWS

### The Month in Washington

(From the Washington Office, AMA)

The Public Health Service Advisory Committee on Immunization has concluded that routine typhoid fever vaccination is not needed any longer in the United States.

Surgeon General William H. Stewart accepted the findings of the committee and stated as PHS policy that immunization against the disease is not recommended on a routine basis.

The committee reported that the incidence of typhoid in this country had declined steadily for many years and now is less than 500 cases a year. A continuance of the downward trend was predicted. "Cases are sporadic and are primarily related to contact with carriers rather than to common source exposure," the committee said. "Recognizing this epidemiologic pattern of typhoid fever, redefinition of the role and use of typhoid vaccine is indicated."

The committee further stated that, "although typhoid vaccine has been suggested for individuals attending summer camps and those in areas where flooding has occurred, there are no data to support the continuation of these practices." However, select immunization was recommended in the following situations:

—Intimate exposure to a known typhoid carrier as would occur with continued household contact.

—Community or institutional outbreaks of typhoid fever.

—Foreign travel to areas where typhoid fever is endemic.

In a separate report, the advisory committee predicted relatively little influenza

during the 1966-67 season, but recommended vaccination after Sept. 1 for certain high-risk groups—such as the chronically ill and older persons.

The committee pointed out, however, that it is reasonable to expect that limited outbreaks of Type A2 influenza will occur in parts of the United States not experiencing Type A disease in 1964-65 or 1965-66. Similarly, the possibility of some Type B influenza is recognized, particularly in the southwest.

"Vaccination when called for should begin as soon as practicable after September 1 and ideally should be completed by mid-December," the committee said. "It is important that immunization be carried out before influenza occurs in the immediate area since there is a two-week interval before development of antibodies."

Because variations in influenza viruses during the 1965-66 season were not of major significance, the composition of the 1966-67 vaccine is unchanged from that prepared for 1965-66.



A senate government operations subcommittee said that more information is needed in the field but that scientific data now available does not indicate human health hazards of sufficient significance to warrant drastic curbs on the use of pesticides.

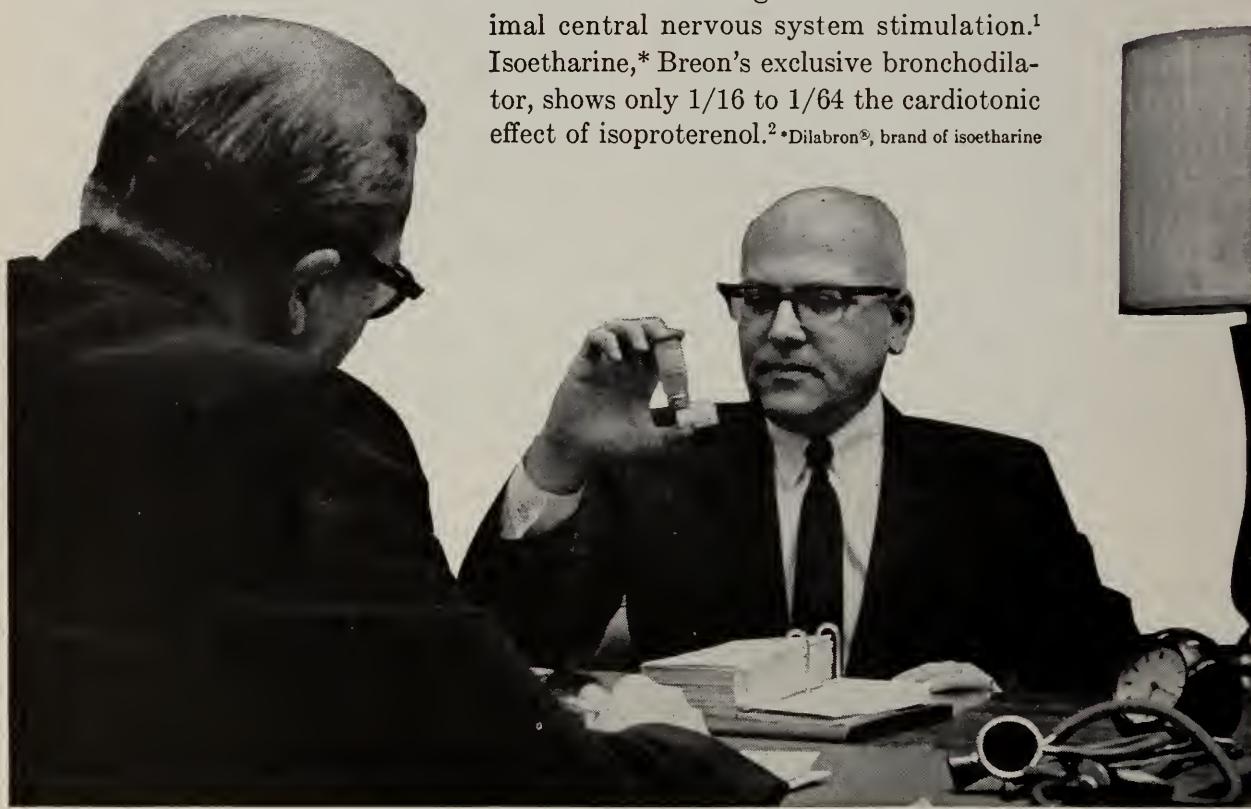
However, the subcommittee reported that "the magnitude of the future risk is uncertain in many important areas. Knowledge regarding the risk of chemical pesticides . . . will have to be broadened and refined considerably in order to provide clear-cut answers to questions that will be forced by the increasing need for pest control in the future," said a subcommittee report based on a two-year study.

"While some of the more gloomy prophecies that had been raised could not be supported by hard scientific fact, it is also true that science could not and still cannot prove that some of these prophecies are untenable."

To combat the human health dangers, the report recommended that the Department of Health, Education and Welfare, accelerate an environmental health program; increased research in human pharmacology; development of safer chemical pesticides

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isoetharine 0.6%; phenylephrine 0.125%; thenyldiamine 0.05%—Superior because it contains isoetharine

**COMPOSITION:** Bronkometer delivers at the mouthpiece 200 metered doses of: 350 mcg isoetharine methanesulfonate (0.6%); 70 mcg phenylephrine HCl (0.125%); and 30 mcg thenyldiamine HCl (0.05%) with saccharin, menthol and fluorochlorohydrocarbons as inert propellants. Preserved with ascorbic acid 0.1% and alcohol 30%.

**RECOMMENDED DOSAGE:** One or two inhalations with at least one minute between inhalations. Occasionally more may be required, however in most cases, inhalations need not be repeated more than every four hours. Dosage should be adjusted to the severity of the condition and to patient's response.

**PRECAUTIONS:** Bronkometer is unusually free from cardiovascular and other side effects, but the usual precautions associated with sympathomimetic amines should be observed. Bronkometer should not be administered simultaneously with epinephrine or similar compounds because of the possibility of tachycardia, although it may be alternated with these agents. Dosage must be carefully adjusted in patients with hyperthyroidism, hypertension, acute coronary disease, cardiac asthma, limited cardiac reserve and in individuals sensitive to sympathomimetic amines.

**SUPPLIED:** 10 ml pressurized aerosol vials complete with measured dose valve and oral nebulizer.

References: 1. Spielman, A. D.: *Curr. Therap. Res.* 3:235 (June) 1961. 2. Herschfus, J. A.; Bresnick, E.; Levinson, L.; and Segal, M. S.: *Ann. Allergy* 9:769 (Nov.-Dec.) 1951.



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which are safer for human beings; greater emphasis on development of non-chemical pest-control methods; training of agricultural workers in good hygiene practices in using pesticides; and general educational programs on health in the chemical age.



The Social Security Administration said that the 460,000 medicare patients in hospitals during the first month of the program's operation did not result in any overcrowding.

There were a few isolated instances of overcrowding, mostly in rural areas, but they already existed before medicare started July 1, the SSA said. The elderly patients occupied from 30 to 35 percent of the beds in general hospitals, in comparison to about 25 percent before medicare. Federal officials had estimated a 5 percent increase.

Inquiries from intermediaries to SSA headquarters as to eligibility for Plan B medical benefits totalled 8700 through July 22. A few spot checks showed assignments leading over direct billings by a small margin. But assignments normally would be filed sooner than direct billings.

There still were about 200 hospitals in the south which had not been qualified as to civil rights requirements on racial integration. This situation left 132 counties that have hospitals with none qualified at the end of the month. By states, the counties were: Mississippi 31, Georgia 23, Louisiana (parishes) 19, Texas 12, Virginia 11, South Carolina 9, Alabama 8, Arkansas 6, Kentucky 6, North Carolina 3, Tennessee 2, Florida 2, and West Virginia 1.

## MEDICAL NEWS IN TENNESSEE

### University of Tennessee College of Medicine

Dr. Frank L. Roberts, Associate Dean of the College of Medicine, has retired from that position after approximately 30 years in medical teaching to become director of the venereal disease control program for the Memphis-Shelby County Health Department. Armed with a medical degree and internship from Minnesota, Dr. Roberts

came to Tennessee in 1924. At that time, he had accepted a traineeship in public health from the Rockefeller Foundation, which had assigned him to Gibson County. He entered the academic world as chairman of the Medical Units' Department of Preventive Medicine in 1937; was named assistant dean of the college in 1948 and became associate dean in 1955.

Dr. M. K. Callison, Dean of the College of Medicine, stated that "Dr. Roberts brought a certain rugged individuality and philosophy, and good humor to his duties as a teacher and as associate dean, that were unique. He is loved by both students and faculty and we shall miss him."

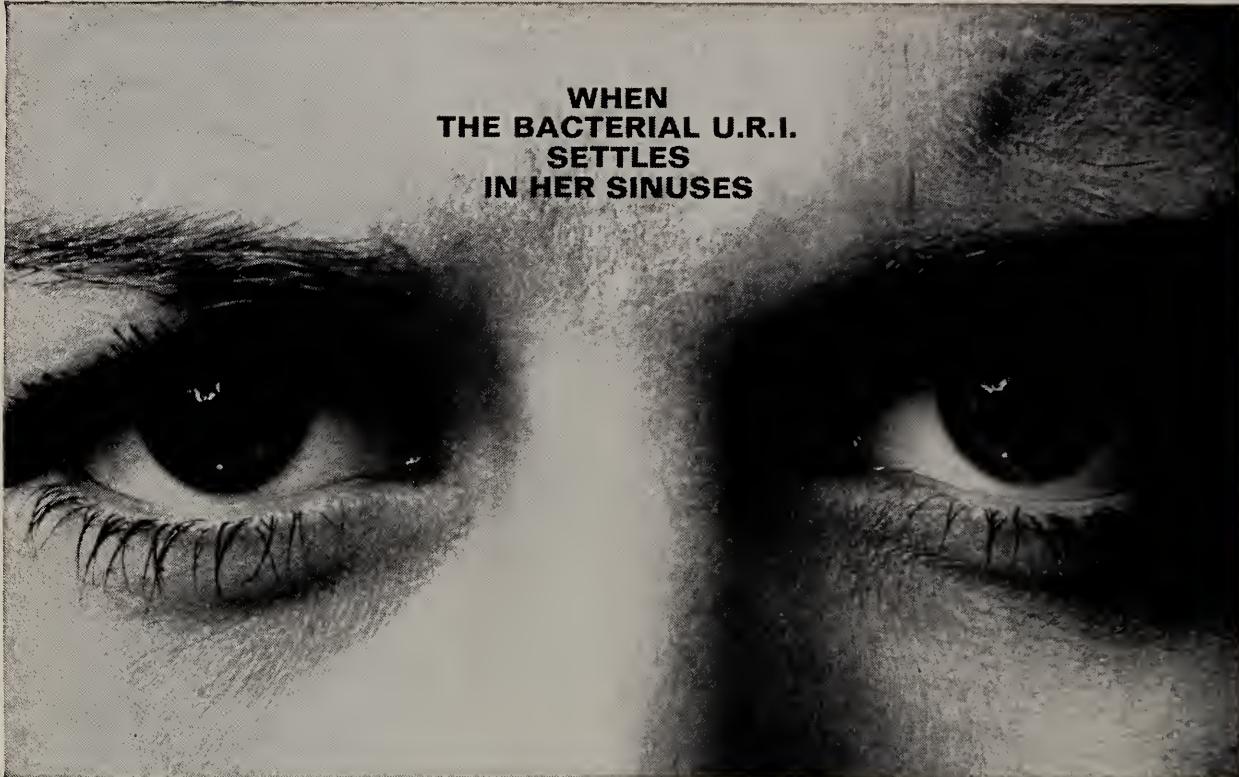


Dr. James Roland Reinberger has been named a clinical professor emeritus on the faculty of the University of Tennessee College of Medicine. Dr. Reinberger started private practice in Memphis in obstetrics and gynecology in 1922 after graduating from Vanderbilt University and serving his internship and residency at Bellevue Hospital of New York. He was appointed instructor in obstetrics and gynecology the same year and was named director of prenatal clinics in 1924. A member of the American Board of Obstetrics-Gynecology and Central Association of Obstetrics-Gynecology, Dr. Reinberger has served as vice-president of the Memphis-Shelby County Medical Society, and as president of the staff at St. Joseph's, Baptist and Methodist Hospitals in Memphis.



Sixteen faculty members of the School of Basic Medical Sciences at the Medical Units have been promoted to higher faculty rank. Promoted from associate professor to professor: Dr. Harry H. Wilcox and Dr. Sidney A. Cohn, Department of Anatomy; Dr. Robert A. Freeman, Microbiology; Dr. James W. Fisher, Pharmacology; Dr. James F. Smith and Dr. Richard H. Walker, Pathology. From assistant professor to associate professors: Dr. G. Dale Buchanan, Anatomy; Dr. Fountaine Christine Brown, Dr. Herbert L. Ennis and Dr. Robert J. Hill, Biochemistry; Dr. Clyde C. Flanigan, Microbiology. From instructor to assistant professor: Dr. Dale E. Bockman, Anatomy; Dr. Willie R. Phillips, Microbiology, and Dr.

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IN HER SINUSES**



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Tetracycline HCl-Antihistamine-Analgesic Compound

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Phenacetin ..... 120 mg

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**Contraindication**—History of hypersensitivity to tetracycline.

**Warning**—If renal impairment exists, even usual doses may lead to liver toxicity. Under such conditions, lower than usual doses are indicated and if therapy is prolonged, tetracycline serum level determination may be advisable. Hypersensitive individuals may develop a photodynamic reaction to natural or artificial sunlight during use. Individuals with a history of photosensitivity reactions should avoid direct exposure while under treatment and treatment should be discontinued at first evidence of skin discomfort.

**Precautions**—Some individuals may experience drowsiness, ano-

rexia, and slight gastric distress. If excessive drowsiness occurs, it may be necessary to increase the interval between doses. Persons on full dosage should not operate any vehicle. Use may result in overgrowth of nonsusceptible organisms. If infections appear during therapy, appropriate measures should be taken. If adverse reaction or idiosyncrasy occurs, discontinue medication and institute appropriate therapy. Infections caused by beta-hemolytic streptococci should be treated for at least 10 full days to help prevent rheumatic fever or acute glomerulonephritis. Use of tetracycline during tooth development (last trimester of pregnancy, neonatal period and early childhood) may cause discoloration of the teeth (yellow-grey-brownish). This effect has been observed in usual short treatment courses.

**Average adult dosage**: 2 tablets four times daily, given at least one hour before, or two hours after meals.

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Frank D. Sticht, Pharmacology. Dr. Gerald B. Spurr and Dr. Lloyd D. Partridge were appointed deputy chairmen in the Department of Physiology and Biophysics.



A program for the training of science librarians, the first of its kind in the nation, has been approved at the Units. The National Library of Medicine has allotted \$156,333 over a three-year period to finance the program which began July 1st. Directors of the program are Dr. Andrew Lasslo, professor and chairman of the Department of Medicinal Chemistry in the College of Pharmacy, and Dr. Richard Overman, assistant dean for research affairs in the College of Medicine.

### Vanderbilt University School of Medicine

A \$30,000 research grant for physicians has been awarded Vanderbilt University by the American Cancer Society. The funds will enable Dr. Sidney Harshman, assistant professor of microbiology at Vanderbilt, to continue his evaluation of substances in the blood serum called mucoids which it is believed may affect the surgical treatment of cancer.



Vanderbilt will receive \$35,000 from the National Cancer Institute for the first year of a five-year project in clinical cancer training under the direction of Dr. Barton McSwain of the department of surgery.



The Helene Fuld Health Foundation of Trenton, N. J., has announced the award of a \$275,000 grant to Vanderbilt University for remodeling the school of nursing building. Renovations are scheduled for completion this fall and will provide nursing students with facilities for training in bedside nursing and clinical work.

This is the second Fuld gift to Vanderbilt for improving student nurse training. Last January, the Foundation made a \$100,000 grant to build the Helene Fuld Clinic for student nurses at the university's student health center.

The Helene Fuld Health Foundation, founded in 1935 by the late Dr. Leonhard Felix Fuld as a memorial to his mother, is dedicated to promoting student nurse health and training.

## SPECIAL LETTER

**TO: DOCTORS OF MEDICINE IN TENNESSEE  
SUBJECT: CANCER DIAGNOSTIC CLINICS  
AND BIOPSY SERVICE FOR EARLY DIAG-  
NOSIS OF CANCER**

Dear Doctors:

Enclosed herewith is a list of the cooperative cancer clinics in Tennessee. Medically indigent patients may be referred to any one of these clinics. Form No. 576 "Request for Diagnostic Service" should be used in referring patients. Copies of this form may be obtained on request from this office or from the local health departments.

Sincerely yours,  
R. H. HUTCHESON, M.D.  
Commissioner, Tennessee  
Department of Public Health

### BRISTOL

Bristol Memorial Hospital Tumor Clinic  
Bristol, Tennessee  
Time: **Friday**  
Hour: 1:00 p.m.

### CHATTANOOGA

Chattanooga Tumor Clinic  
Erlanger Hospital  
Chattanooga, Tennessee  
\*Time: **Tuesday Friday**  
Hour: 12:30 p.m. 12:30 p.m.

\*Patients are seen by appointment only.

### JOHNSON CITY

Tri-County Cancer Clinic  
Health Center, 102 West Myrtle  
Johnson City, Tennessee  
Time: **Thursday**  
Hour: 1:00 p.m.

### KNOXVILLE

East Tennessee Tumor Clinic  
University of Tennessee Memorial Hospital  
Knoxville, Tennessee  
Time and Hour:

**Monday**  
7:00 a.m.—E.N.T. Clinic  
11:00 a.m.—G.U. Clinic

**Wednesday**  
11:00 a.m.—Chest Clinic  
11:00 a.m.—Plastic Surgery Clinic

**Thursday**  
8:00 a.m.—Proctology Clinic  
8:00 a.m.—Dental Clinic  
8:00 a.m.—Surgery Clinic  
8:00 a.m.—Hematology Clinic  
8:00 a.m.—Dermatology Clinic  
11:00 a.m.—Gynecology Clinic

**Friday**  
11:00 a.m.—G. U. Clinic

### KINGSPORT

Holston Valley Community Hospital Cancer Clinic



## The population explosion

Chomp. Chomp. Chomp. He's off again on another spree of second helpings.

Tomorrow, crash! He'll be on a new-fangled diet. Starving himself.

He's just one of the many who bounce between starvation and overeating, and with every rebound make losing weight more difficult.

As a professional, you can help. First by pointing out that skipping meals is no solution, and second by recommending long-range weight control through sensible eating habits and nourishing foods. Every day. Day after day.

Naturally, balanced diets and nourishing, palatable dairy foods go together; they always have.

Project Weight Watch has been initiated to assist you. Its scope is nationwide, its purpose is to focus professional attention on the problem.

To help you translate your concern to your patients, a portfolio of materials is available. Send for it. Support girth control.

DAIRY COUNCILS OF TENNESSEE

Appalachian Area (Bristol) — Chattanooga — Knoxville — Memphis — Nashville



Kingsport, Tennessee

Time: **Friday**

Hour: 12:30 p.m.

**MEMPHIS**

West Tennessee Cancer Clinic

21 North Dunlap

Memphis, Tennessee

\*Time and Hour:

**Monday**

- 8:30 a. m.—New Patients  
 9:00 a. m.—Follow-Up E.N.T. (all larynx cases)  
 12:00 Noon—Follow-Up Breast

**Tuesday**

- 8:30 a. m.—New Patients  
 9:00 a. m.—Follow-Up GI, Soft Tissue, Bone  
 12:00 Noon—Follow-Up GYN (Shelby County Cases)

**Wednesday**

- 9:00 a. m.—Follow-up Skin  
 12:00 Noon—Follow-Up Chemotherapy, Thoracic, Eye (2nd Wednesdays Only)

**Thursday**

- 8:30 a. m.—New Patients  
 9:00 a. m.—Follow-Up Head & Neck (all thyroid cases)  
 12:00 Noon—Follow-Up Urology

**Friday**

- 9:00 a. m.—Follow-Up GYN (Out of Shelby County cases)  
 12:00 Noon—Follow-Up Urology, Pediatric  
 \*Doctors should mail requests for service into clinic, thereby establishing definite appointments for patients. Emergencies handled upon telephone request.

**NASHVILLE**

Hubbard Hospital Tumor Clinic  
 1005 18th Avenue North, "A" Floor  
 Nashville, Tennessee

Time: **Tuesday and Friday**

Hour: 1:30 p.m.

Nashville General Hospital Tumor Clinic  
 Hermitage Avenue  
 Nashville, Tennessee

\*Time and Hour:

**Tuesday**

- 12:30-5:00 p. m.—General and Thoracic Surgery

**Wednesday**

- 12:30-5:00 p. m.—Head and Neck, Urology

**Friday**

- 9:30-12:30 p. m.—Gynecology

\*Patients are seen by appointment only.

Vanderbilt University Hospital Cancer Clinic  
 Twenty-First Avenue South  
 Nashville, Tennessee  
 Time and Hour:

**Monday**

- 1:00 p. m.—Neurosurgery

**Tuesday**

- 12:00 Noon—Hematology

**Wednesday**

- 1:00 p. m.—E.N.T.

**Thursday**

- 9:00 a. m.—Gynecology, Surgery  
 1:00 p. m.—Chemotherapy

**Friday**

- 8:00 a. m.—Chest

Following is a list of the pathologists for the fiscal year 1966-1967 who are participating in the biopsy service for the early diagnosis of cancer. This service is limited to the examination of specimens from medically indigent patients.

1. Containers for sending specimens may be obtained on request from: Division of Laboratories, Tennessee Department of Public Health, Cordell Hull Building, Nashville 37219.

2. Only biopsy specimens will be examined. Specimens from the breast are an exception. No other post-operative specimen will be examined.

3. Place the biopsy specimen in the fluid in the container. **Do not pour out the fluid.**

4. Two copies of Form No. 570 are in the container; fill out completely both copies and sign them. The pathologists have been requested not to accept specimens when the form is not completely filled out in duplicate and signed.

5. Place the completed forms around the inner container.

6. Make sure the lids are on tight.

7. Address the yellow mailing label to the pathologist of your choice, place on the label your return address, attach the label to the outer container, and mail.

8. **Do Not Mail** the specimens to the State Laboratory.

If we can be of assistance, please let us know.

**Pathologists Participating in the Biopsy Service for the Early Diagnosis of Cancer 1966-1967**

ADAMS, John W., Jr., M. D.

261 Wiehl Street

Chattanooga, 37403

AUERBACH, Stewart H., M. D.

Baroness Erlanger Hospital

Chattanooga, 37403

BALE, George F., M. D.

Baptist Memorial Hospital

Memphis, 38103

BEALS, Daniel F., M. D.

U. T. Memorial Hospital

Knoxville, 37920

BELLOMY, Bruce B., M.D.

Ft. Sanders Pres. Hospital

Knoxville

BROWNE, Harry G., M. D.

201 Twenty-First & Hayes Bldg.

Nashville, 37203



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hyperactive  
colon**

## CANTIL® (mepenzolate bromide)

### helps restore normal motility and tone

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function . . . Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects . . . Urinary retention, noted in two cases was eliminated in one by reducing dosage."<sup>1</sup>

**IN BRIEF:** One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy— withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

**Supplied:** CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250, CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1. Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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CARABIA, Alex G., M. D.  
Oak Ridge Hospital  
Oak Ridge, 37831

CRAWFORD, Alvin S., M. D.  
Bristol Memorial Hospital  
Bristol, 37622

DELVAUX, Thomas C., M. D.  
St. Thomas Hospital  
Nashville, 37203

\*DIGGS, Lemuel W., M. D.  
42 North Dunlap  
Memphis

DUCKWORTH, John K., M. D.  
1265 Union Avenue  
Memphis, 38104

ELROD, Bruce A., M. D.  
P. O. Box 3058, Highland Park Sta.  
Chattanooga, 37403

ERICKSON, Cyrus C., M. D.  
Institute of Pathology  
University of Tennessee  
Memphis, 38104

FARROW, C. C., M. D.  
257 South Bellevue  
Memphis, 38104

FRANCISCO, J. T., M.D.  
University of Tennessee  
P. O. Box 153  
Memphis, 38105

FRAZIER, Horace M., M. D.  
Meharry Medical College  
Nashville, 37208

GOTWALD, David, M. D.  
St. Thomas Hospital  
Nashville, 37203

GRAHAM, L. S., M. D.  
2010 Church Street  
Nashville, 37203

HARRISON, William, Jr., M. D.  
H. V. C. Hospital  
Kingsport, 37660

HEPLER, Thomas K., M. D.  
Memorial Hospital  
Clarksville, 37040

JONES, Chester, M. D.  
General Hospital  
Jackson, 38303

JONES, Francis S., M. D.  
U. T. Memorial Hospital  
Knoxville, 37919

KINTNER, Elgin P., M.D.  
Box 89  
Maryville, 37803

LEFFLER, R. J., M. D.  
East Tenn. Baptist Hospital  
Knoxville, 37920

McMURRY, Searle, M. D.  
Ft. Sanders Pres. Hosp.  
Knoxville, 37916

MAHON, George S., M. D.  
St. Mary's Memorial Hospital  
Knoxville, 37917

MASHBURN, J. D., M. D.  
1265 Union Avenue  
Memphis, 38104

MAYFIELD, George R., M.D.  
Maury County Hospital  
Columbia, 38401

MIDDLETON, A. L., Jr., M. D.  
General Hospital  
Jackson, 38303

MOSS, T. C., M. D.  
257 South Bellevue  
Memphis, 38116

MUIRHEAD, E. Eric, M. D.  
Baptist Memorial Hospital  
Memphis, 38103

NELSON, Bill M., M. D.  
ORINS Medical Div., Box 117  
Oak Ridge, 37831

PHILLIPS, J. Douglas, M. D.  
1265 Union Avenue  
Memphis, 38104

PHYTHYON, James M., M. D.  
2010 Church Street  
Nashville, 37203

POTTER, Thomas P., Jr., M. D.  
Memorial Hospital, Inc.  
Johnson City, 37601

PRIETO, L. C., Jr., M. D.  
St. Joseph Hospital  
Memphis, 38128

SHAPIRO, John L., M. D.  
Vanderbilt Hospital  
Nashville, 37203

SPRUNT, Douglas H., M. D.  
Institute of Pathology  
University of Tennessee  
Memphis, 38105

SULLIVAN, Earl J., M. D.  
Memorial Hospital, Inc.  
Johnson City, 37601

TRUMBULL, Merlin L., M. D.  
Baptist Memorial Hospital  
Memphis, 38103

WALKER, Richard H., M. D.  
Institute of Pathology  
University of Tennessee  
Memphis, 38105

WILSON, Stephen G., Jr., M. D.  
St. Mary's Hospital  
Knoxville, 37917

WOMACK, Frank C., M. D.  
2010 Church Street  
Nashville, 37203

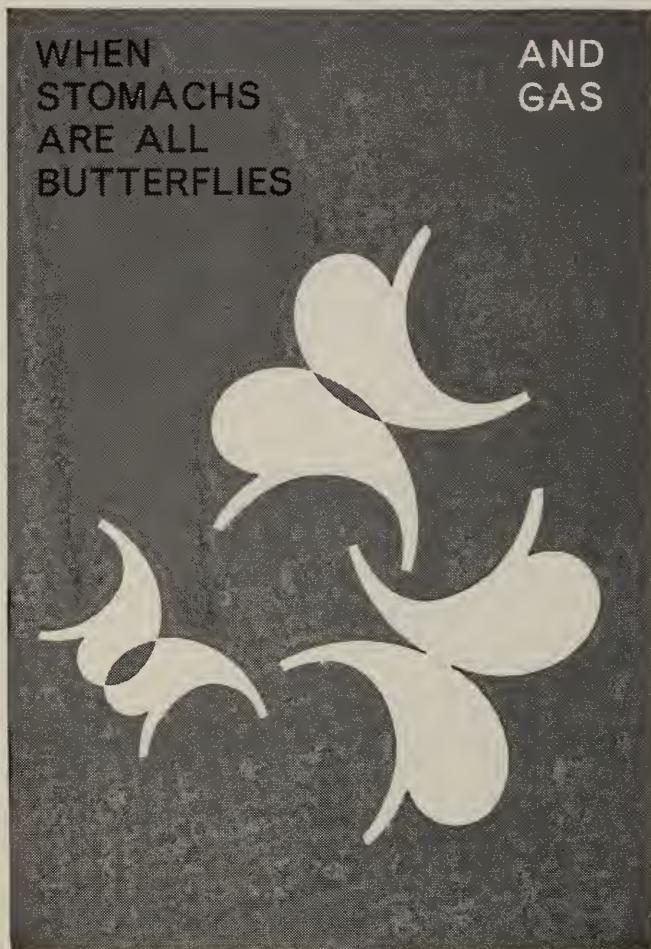
## DACTILASE®

Each tablet contains:

Dactil® (piperidolate hydrochloride), 50 mg.;  
Standardized cellulolytic\* enzyme, 2 mg.;  
Standardized amylolytic enzyme, 15 mg.;  
Standardized proteolytic enzyme, 10 mg.;  
Pancreatin 3X\*\* (source of lipolytic activity),  
100 mg.; Taurocholic acid, 15 mg.

\*Need in human nutrition not established.

\*\*As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.



In chronic or acute indigestion, fluttery, gassy stomachs obtain prompt, gratifying relief through the antispasmodic, surface anesthetic and enzymatic activity of Dactilase. Dactilase decreases hypermotility and pain and reduces the production of gas. Dactilase does not induce stasis, but helps restore normal tone. It has little or no effect on enzyme secretions, but adds enzymes, thus contributing to the digestive efficiency of the patient.

#### Side Effects and Contraindications:

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

**Administration and Dosage:** One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

**Supplied:** Bottles of 60 and 250.

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## PERSONAL NEWS

**Dr. Harry Lee Page, Jr.**, has become associated with **Dr. Crawford Adams**, Nashville, in the practice of cardiovascular diseases.

**Dr. Barry P. McIntosh**, Hernando, Miss., has begun the practice of radiology at Henry County General Hospital in Paris.

**Dr. Wendell W. Wilson**, Old Hickory, has been elected president of the Nashville Memorial Hospital medical and dental staff, succeeding **Dr. Jefferson C. Pennington, Jr.**, of Nashville. **Dr. Robert L. Pettus, Jr.** was named vice-president and **Dr. James Hastie**, secretary-treasurer.

**Drs. H. G. Browne** and **J. B. Thomison** announce their association in the partnership practice of clinical and anatomic pathology in the 21st and Hayes Medical Building and Park View Hospital in Nashville.

**Dr. Cecil Mynatt**, Knoxville, has been appointed superintendent of East Tennessee Psychiatric Hospital, succeeding **Dr. Andrew S. Wachtel**. Dr. Wachtel resigned as superintendent of the hospital to enter private practice at Oak Ridge.

**Dr. Glenn E. Horton**, Memphis, prepared the scientific exhibit on Respiratory Allergy, sponsored by the Committee on Allergy of the American College of Chest Physicians and presented on Diseases of Chest Section at the 115th annual meeting of AMA in Chicago. Dr. Horton was also a panelist and demonstrator on the special exhibit on Pulmonary Function, sponsored by the Section of Diseases, AMA, and the American College of Chest Physicians.

**Dr. Curtis McGown**, Clarksville, has volunteered for a sixty-day period of service with Project Viet-Nam. He departed from San Francisco on August 2nd with a group of volunteer physicians.

**Dr. John D. Crabtree** began the practice of medicine in Gainesboro, July 1st. He is associated with **Dr. J. S. Johnson**.

Governor Frank Clement has reappointed three members of the Public Health Council to three-year terms. They are: **Dr. J. Kelley Avery**, Union City; **Dr. John W. Adams**, Chattanooga; and **Dr. Morse Kocktitzky** of Nashville.

**Dr. Glenn M. Clark**, assistant dean for hospital affairs at the UT School of Medicine, chief of staff of Memphis hospitals, and chairman of the Medical Board, was guest speaker at a recent meeting of the Memphis Jaycees.

**Dr. James C. Bradshaw, Jr.**, Lebanon, has been elected to active membership in the American Academy of General Practice.

Drs. Scribner, Carter and Maddox, Holston Valley Community Hospital, Kingsport, announce the association of **Dr. Thomas N. Rucker** in the practice of radiology.

**Dr. Thurman Lee Pedigo** has begun the practice of medicine and surgery in Smithville. His

office is located in the Doctor's Building on Church Street.

**Dr. Gould A. Andrews**, chairman of the medical division of Oak Ridge Associated Universities, has been appointed to the International Advisory Board of "Minerva Nucleare," the official journal of the Italian Society of Nuclear Biology and Medicine.

**Dr. James W. Pate** has been elected president of the Memphis Heart Association for 1966-67, replacing **Dr. Burt Friedman**. **Dr. Maury Bronstein** was named president-elect; **Dr. J. Leo Wright**, vice president.

**Dr. Robert Henry Lee** has opened his office for the practice of medicine in Dover.

**Dr. Roy A. Douglass** has been elected chief of staff at Carroll County General Hospital. **Dr. J. T. Holmes** was named assistant chief of staff, and **Dr. Jerry Atkins**, secretary-treasurer.

**Dr. Charles W. Marsh** and **Dr. Earl E. Roles, Jr.** announce the removal of their offices to 106 Westside Drive, Tullahoma.

## BOOK REVIEW

**NEW DRUGS. 1966 Edition. A.M.A. Chicago, Illinois. Price \$4.00.**

The reviewer need do no more than to call attention to this annual evaluation of drugs by the A.M.A. Council on Drugs. For the physician who wishes an authoritative statement and description of new drugs there is no better yardstick than this. For the physician who takes his prescribing seriously, the expenditure annually of \$4 is getting off cheaply.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966-67

#### State

Sept. 26-27	Tennessee Valley Medical Assembly, Tivoli Theater, Chattanooga
Oct. 12-13	Second Tennessee Congress on Mental Illness & Health, Hotel Hermitage, Nashville
Oct. 19	Fourth Annual Rural Health Conference, Holiday Inn, Cleveland, Tenn.
Oct. 31	Course in Intensive Coronary Care Nursing, Baptist Hospital, Nashville
Nov. 9-11	Tennessee Academy of General Practice, 18th Annual Scientific Assembly and Congress of Delegates, Gatlinburg Auditorium, Gatlinburg

For cold hands and feet, nothing beats hot stoves—but they *are* awkward to carry around. Now Gerilid, in good-tasting take-along chewable tablets can provide rapid vasodilation of peripheral circulation, bringing real warmth to the extremities and decreasing sensitivity to sudden temperature change. Patients *like* Gerilid and *know* they are getting relief.

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**Administration and Dosage:** One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

**Side effects:** Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

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Nov 14-17	Southern Medical Association, Hilton Hotel, Washington, D.C.	Nov. 2-3	American College of Preventive Medicine, San Francisco Hilton, San Francisco
Dec. 5-7	Southern Surgical Association, The Homestead, Hot Springs, Va.	Nov. 3-5	Southeastern Chapter, Society of Nuclear Medicine, Durham, North Carolina
Jan. 20-21, 1967	American College of Surgeons, Arizona Chapter, Arizona Inn, Tucson	Nov. 26-27	American College of Chest Physicians, Flamingo Hotel, Las Vegas, Nev.
Feb. 15-19, 1967	Atlanta Graduate Medical Assembly, Atlanta Marriott Motor Hotel, Atlanta	Nov. 27-30	American Medical Association, Las Vegas, Nevada
Feb. 13-16, 1967	Medical Society of the State of New York, Americana Hotel, New York City	Dec. 2-7	American Academy of Dermatology, Palmer House, Chicago
Feb. 23-25, 1967	Central Surgical Association, Pittsburgh-Hilton Hotel, Pittsburgh, Pa.	Jan. 13-14, 1967	American Society for Surgery of the Hand, Jack Tar Hotel, San Francisco
		Jan. 14-19, 1967	American Academy of Orthopaedic Surgeons, Civic Auditorium, San Francisco
		Jan. 23-25, 1967	Society of Thoracic Surgeons, Muehlbach Hotel, Kansas City, Mo.
Sept. 29-Oct. 2	American Medical Writers' Association, Annual Meeting, Waldorf Astoria, New York City	Feb. 15-19, 1967	American College of Cardiology, Washington Hilton Hotel, Washington, D. C.
Oct. 1-5	American Society of Anesthesiologists, Sheraton Hotel, Philadelphia	Feb. 18-22, 1967	American Academy of Allergy, Holiday Inn-Riviera, Palm Springs, Calif.
Oct. 1-7	Annual Otolaryngologic Assembly of 1966, Illinois Eye and Ear Infirmary at the Medical Center, Chicago		
Oct. 2-7	American Society of Plastic and Reconstructive Surgeons, Inc., Flamingo Hotel, Las Vegas, Nev.		
Oct. 10-13	American Academy of General Practice, War Memorial Auditorium, Boston		
Oct. 10-14	American College of Surgeons, Fairmont Hotel, San Francisco		
Oct. 13-15	Association of American Physicians and Surgeons, Disneyland Hotel, Anaheim, Calif.		
Oct. 15-16	American Association of Ophthalmology, Palmer House, Chicago		
Oct. 16-21	American Academy of Ophthalmology & Otolaryngology, Palmer House, Chicago		
Oct. 17-20	American Academy of Neurological Surgery, San Francisco		
Oct. 17-22	Congress of Neurological Surgeons, Americana Hotel, San Juan, P.R.		
Oct. 21-25	Association of American Medical Colleges, San Francisco Hilton Hotel, San Francisco		
Oct. 22-27	American Academy of Pediatrics, Palmer House, Chicago		
Oct. 23-26	American College of Gastroenterology, Bellevue-Stratford Hotel, Philadelphia		

### **Submission of Abstracts for Annual Meeting of American Thoracic Society**

The Medical Sessions Committee invites submission of papers on all scientific aspects of tuberculosis and nontuberculous respiratory and cardiopulmonary diseases for presentation at the 1967 annual meeting in Pittsburgh, May 22-24. Membership in the Society is not a prerequisite to participation on the program. Abstracts of papers should be submitted before January 5, 1967, to the Chairman of the Medical Sessions Committee. Authors will be notified by February 10 if their papers have been accepted for presentation. Additional information and specifications for typing abstracts may be obtained from: Eugene D. Robin, M.D., Chairman, Medical Sessions Committee, American Thoracic Society, 1790 Broadway, New York, N. Y. 10019.

### **Four-Day Course on Cutaneous Medicine Set for Internists**

The American College of Physicians will sponsor a four-day course on "Advances in Cutaneous Medicine," in Rochester, Minn., Sept. 28-Oct. 1. The course, one of 20 being held throughout the United States, will be given in Mann Hall of the Medical Science Building at the University of Minnesota Mayo Graduate School of Medicine. The ACP course has been designed to help keep practicing internists abreast of the relationship

In fact, there's as much iron...250 mg. ...in a 5 cc. ampul of Imferon (iron dextran injection) as in a pint of whole blood. When iron deficient patients are intolerant of oral iron...or orally administered iron proves ineffective or impractical...or if the patient cannot be relied upon to take oral iron as prescribed, Imferon (iron dextran injection) dependably increases hemoglobin and rapidly replenishes iron reserves.

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## IMFERON® (iron dextran injection)

**IN BRIEF: ACTION AND USES:** A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically-diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

**COMPOSITION:** Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

**ADMINISTRATION AND DOSAGE:** Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

**SIDE EFFECTS:** Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoxoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

**PRECAUTIONS:** If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

**CONTRAINdications:** Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

**CARCINOGENICITY POTENTIAL:** Using relatively massive doses, Imferon (iron dextran injection) has been shown to produce sarcoma in rats, mice and rabbits and possibly in hamsters, but not in guinea pigs. The risk of carcinogenesis, if any in man, following recommended therapy with Imferon (iron dextran injection) appears to be extremely small.

**SUPPLIED:** 2 cc. ampuls, boxes of 10; 5 cc. ampuls, boxes of 4; 10 cc. multiple dose vials.

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between cutaneous and systemic disease and to emphasize the methods of utilizing the techniques of clinical and laboratory investigation for diagnosis. Internists attending will receive instruction in such subjects as vascular diseases of the skin, endocrine disease involving the skin, the skin and joints, the skin and the gastrointestinal tract and the collagen diseases.

The ACP Postgraduate Course No. 2 entitled "The Care of the Critically Ill Medical Patient," will be presented Oct. 3-7 at State University of New York Upstate Medical Center, Syracuse, New York. Send registrations, requests for information and application blanks to: Edward C. Rosenow, Jr., M.D., F.A.C.P., Executive Director, American College of Physicians, 4200 Pine Street, Philadelphia, Pa. 19104.

### American Cancer Society, Inc.

The 1967 Scientific Session of the American Cancer Society will be held at the Sheraton-Dallas Hotel in Dallas, Texas, May 3rd. The symposium on "Current Concepts in Etiology and Diagnosis of Cancer" is open to all members of the medical professions and students. There is no advance registration or registration fee. For further information write: Director of Professional Education, American Cancer Society, Inc., 219 East 42nd Street, New York, New York 10017.

\* \* \*

**MURFREESBORO — VACANCIES: STAFF PHYSICIANS** for 1275 bed Neuropsychiatric Hospital, including 350 general medical and geriatric. Modern facilities for diagnosis and treatment of mental illness. Salary \$12,510 to \$22,365, depending on qualifications; fringe benefits; cost of moving to Murfreesboro will be paid by Veterans Administration; visit here for evaluation can be arranged at our expense. Excellent educational opportunities for students in this area. Contact Director, Veterans Administration Hospital, Murfreesboro, Tenn.

### Course in Medical and Science Writing

Two and a half days of lectures and workshops in medical and basic science writing will be held Nov. 11-13, 1966, at Asilomar, Pacific Grove, California, under the sponsorship of the Northern California chapter of the American Medical Writers Association. The second in a proposed series of intensive courses with limited enrollment, the meeting will feature three speakers who are expert in this specialized field of communication, and each lecture will be followed by small-group clinical discussions of published or unpublished papers offered for criticism by enrollees. For registration or further information contact: Harry Messinger, M.D., Ph.D., 3029 Benvenue Avenue, Berkeley, California 94705.

### Mound Park Hospital Foundation, Inc.

A symposium on "Industrial Medicine: The Doctor's Role in Occupational Health" will be sponsored by Mound Park Hospital Foundation, Department of Medical Education of the Mound Park Hospital, Bay Pines, V. A. Hospital, Pinellas County Medical Society, University of South Florida Division of Continuing Education, American Academy of General Practice—Oct. 20-22 inclusive. The Foundation reserves the right to limit registration. Fee \$40. Eighteen accredited hours by AAGP. Address: Industrial Medicine, Mound Park Hospital Foundation, Inc., St. Petersburg, Florida 33701.

Applications solicited for chief medical service and a staff physician, medical service, 228-bed accredited GM&S hospital. Salary commensurate with experience and training. Excellent fringe benefits include liberal annual and sick leave accruals. Health benefits, life insurance and retirement benefits at nominal cost to employee. Contact Director, VA Hospital, Poplar Bluff, Mo.

Large Clinic in Southwest desires to add one or more board certified or eligible anesthesiologists to its staff. Excellent climate and promising academic possibilities. Remuneration open to negotiation. For further details write to Dr. John H. Birch, M.D., Dept. of Anesthesia, Lovelace Clinic, Albuquerque, N. M. 87108.

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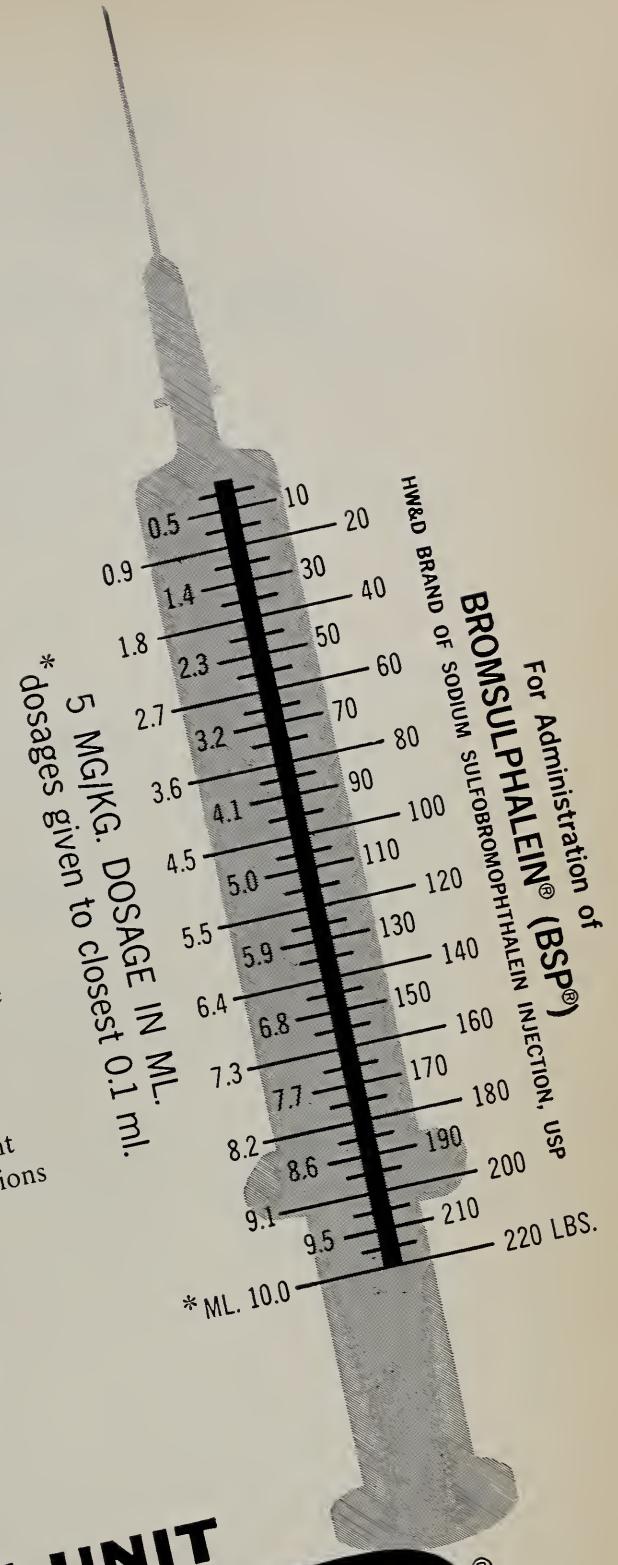
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# Journal of the Tennessee Medical Association

## OWNED AND PUBLISHED BY THE ASSOCIATION

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No. 10

This paper outlines briefly what the natural history of disease may be in the Rh positive infant. It also illustrates the more recent diagnostic methods which may offer information on prognosis and indications for the new treatment of intrauterine transfusion of the infant.

## New Methods in the Management of Rh Sensitized Pregnant Women\*

RALPH R. KLING, M.D., JOSEPH A. PRYOR, M.D., and  
EVERETT M. CLAYTON, M.D., Nashville, Tenn.

The initial event in the etiology of erythroblastosis fetalis is thought to be the escape of Rh positive fetal erythrocytes into the maternal circulation of Rh negative women, thereby, stimulating the production of Rh antibodies. These antibodies are transported across the placenta into the fetal circulation and destroy the Rh positive red cells of the fetus who, thus affected, is said to have erythroblastosis fetalis.<sup>1</sup>

Approximately 3 out of every 100 Rh negative women will have a baby with erythroblastosis. However, once this has occurred virtually 100% of future Rh positive infants will be affected. Without benefit of therapeutic assistance in the natural course of this disease, 30% of all babies who develop erythroblastosis will succumb.<sup>2</sup>

Until relatively recently the only indication of the severity of this condition was measurement of the maternal Rh antibody titer, which does not reflect the status of the fetus in utero. Quite often unaffected Rh negative babies are born in the presence of high maternal antibody titers and conversely severely affected Rh positive babies are born of women with low antibody titers.

Spectrophotometric analysis of amniotic fluid which directly reflects the status of the fetus in utero in the Rh sensitized pregnant woman has brought about a change in the management of these patients. This test offers a biochemical quantitation of fetal

substances and gives a reliable basis for clinical management.<sup>3</sup>

The amniotic fluid is obtained for analysis by transabdominal amniocentesis. This procedure is carried out when a positive maternal antibody titer is discovered after 20 weeks gestation. The procedure is as follows:

- (1.) The bladder is emptied.
- (2.) The abdomen is prepared with an antiseptic solution.
- (3.) The fetal position is ascertained and the uterus is entered at approximately the level of the fetal umbilicus by a 3½ inch 20 gauge spinal needle with stylet in place.
- (4.) 5 to 10 ml. of amniotic fluid are removed and immediately centrifuged at 2000 rpm for 10 minutes.
- (5.) The supernatant fluid is then removed and protected from light until it is read on a spectrophotometer in the visual range of 455 mu wave-lengths and again at 575 mu wave-lengths.<sup>4</sup>

The difference in these two values read as optical density represents the bilirubin or bilirubin-like substances in the amniotic fluid. It has been established that the amount of these substances has a direct relationship to the severity of the intrauterine fetal hemolysis. Values which are found to be below a certain range in optical density indicate that the fetus is unaffected or only mildly affected. Values which are above this level but below a critical level show that the fetus is significantly affected. Values which are above the critical range

\*From the Department of Obstetrics and Gynecology, Vanderbilt University School of Medicine, Nashville, Tennessee.

reflect imminent intrauterine fetal death.<sup>5</sup>

The clinical application of this test in the management of patients is as follows: The first or mildly affected group should be allowed to progress to term without intervention. In the significantly affected group delivery before term would be dictated by subsequent analysis of the amniotic fluid. In the last group the fetus must be transfused in utero if it is to survive to a viable age. It cannot be overemphasized that repeated amniocenteses are indicated before a proper decision on clinical management can be made.

The following case reports will serve to illustrate the value of the spectrophotometric analysis amniotic fluid in the clinical management of the pregnant Rh sensitized woman. These 4 cases were selected from a total experience of 25 patients who had had amniocentesis.

**Case 1.** This was a gravida 4, para 3, abortion 0, Rh negative patient with an Rh positive husband. (Heterozygous) her last baby was mildly affected.

She was found to have an antibody titer of 1 to 160 and an amniotic fluid optical density of 0.14 at 26 weeks gestation. This was repeated at 28 weeks and again at 32 weeks with optical density values of the amniotic fluid which steadily decreased to 0.12 and 0.07.

This pregnancy progressed to term and ended with the spontaneous onset of labor and delivery of a living normal female infant who was found to be Rh negative and free of hemolytic disease of the newborn.

**Case 2.** A 34 year old gravida 5, para 2, abortion 2, patient was found to be Rh negative with an Rh positive husband. Her last baby died in utero of erythroblastoses fetalis at 37 weeks gestation.

In the present pregnancy the antibody titer was 1 to 80 at 27 weeks and the optical density of the amniotic fluid 0.14. Subsequently, the antibody titer rose to 1 to 160 but the optical density of the amniotic fluid was essentially unchanged until 36 weeks at which time it rose to 0.18.

The baby was delivered at this time and required 2 exchange transfusions after birth. The baby is living and well today.

**Case 3.** This 26 year old, gravida 4, para 3, abortion 0, Rh negative patient has an Rh positive husband. Her second pregnancy terminated in neonatal death 3 days postpartum from erythroblastosis. Her last pregnancy ended the intrauterine fetal death of an erythroblastotic infant at 35 weeks gestation.

At 27 weeks gestation of the current pregnancy the antibody titer was found to be 1 to 256. The optical density of the amniotic fluid was 0.25 and

had risen to 0.32 at 28 weeks. At this time the first of 3 transabdominal intrauterine fetal transfusions was done. Subsequent intrauterine fetal transfusions, using the image intensifier fluoroscopic technic to insert a needle into the peritoneal cavity of the fetus, were done at 31 weeks and again at 33 weeks gestation. At 32 weeks gestation the optical density of the amniotic fluid was 0.46 but the maternal antibody titer remained at 1 to 256.

A 4 lb. 2 oz. female infant was delivered at 34½ weeks gestation by cesarean section. The initial packed cell volume was 21. Seventy percent of the infant's red cells were found to be adult red cells, absorbed from the fetal abdomen subsequent to the previous transfusion.<sup>6</sup> This baby is living and well following the 3 exchange transfusions after birth.

**Case 4.** This woman was a gravida 3, para 2, abortion 0, Rh negative patient with an Rh positive husband whose second pregnancy had terminated in intrauterine fetal death at 26 weeks gestation of unknown cause.

At 31 weeks gestation the first maternal Rh antibody titer drawn was found to be 1 to 320 and 5 days later the optical density of the amniotic fluid was found to be 0.82. (the highest recorded at Vanderbilt University Hospital to date). The infant survived only 4 hours following transabdominal intrauterine transfusion.

(This case is reported simply to demonstrate the futility of intrauterine fetal transfusion if severe erythroblastoses fetalis is not diagnosed early in its course.)

## Discussion

In presenting Cases 3 and 4 intrauterine fetal transfusion was mentioned as part of the management. It seems appropriate at this point to describe the technic that has been developed for this procedure.

Intrauterine fetal transfusion was first reported by Liley<sup>7</sup> in 1963, consequently most of the fetal transfusions in this country have been patterned after his original technic as follows: A small catheter is passed through a relatively large Touhy needle which has been inserted into the fetal peritoneal cavity with the visual aid of an image intensifier fluoroscope. The needle is then removed and the catheter is left in place for the duration of the transfusion. A major variation from this technic was reported by Queenan,<sup>8</sup> who has chosen to introduce a long 20 gauge spinal needle into the fetal peritoneal cavity with the visual aid of standard x-ray examinations. The fetal transfusion is given directly through the needle.

The technic employed in the intrauterine

transfusions done at Vanderbilt University Hospital combines the salient features of the above procedures in that a 6 or 8 inch 20 gauge spinal needle is introduced into the lower fetal abdomen under direct vision with the use of an image intensifier fluoroscope.

A total of 7 intrauterine transfusions on 4 different patients has been performed with 5 successful procedures. Two infants with severe erythroblastosis failed to survive the twenty-four hours after transfusion.

#### Conclusion

Analysis of the amniotic fluid and intrauterine fetal transfusions have opened new avenues of management in Rh sensitized pregnant women. In the past the obstetrician has been dependent upon laboratory procedures which have had no consistent relationship to the status of the fetus. Now, not only is there a reliable method of determining the degree of fetal involvement, but

there is also a means by which the unborn fetus affected by erythroblastosis fetalis may be treated.

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mended.*

The author reviews the developments in the management of occlusive arterial disease of the lower extremities. He outlines the use of conservation treatment as well as the surgical approaches now in use.

# Modern Management of the Ischemic Leg\*

MALCOLM R. LEWIS, M.D.,<sup>†</sup> Nashville, Tenn.

The proper roles of surgery and conservative therapy in occlusive arterial disease in the leg have become greatly clarified in recent years. The great impetus to arterial reconstruction created by the introduction of synthetic replacements resulted in considerable disillusionment when it became apparent that these were unsatisfactory in smaller vessels of the leg. Some bad results occurring in this earlier period produced a stigma against arterial surgery which is only now being alleviated by a considerable improvement in results. This improvement is due in large part to a better understanding of surgical indications and to some extent to improvements in technic and selection of operation. Eight years of operative experience with peripheral vascular disease has led me to a program of management believed to be distinctly superior to that of the recent past.

## Conservative Therapy

Many early and some advanced cases of occlusive arterial disease can be satisfactorily managed without surgical procedures. The principles involved in conservative treatment therapy need to be borne constantly in mind. (Table 1.)

Table I  
CONSERVATIVE MEASURES

1. Elevation of head of bed (avoid swelling).
2. No heat!
3. Cessation of smoking.
4. Vasodilator drugs and anticoagulants (of limited value).

Elevation of the head of the bed on six inch wooden blocks results in a slight but sometimes crucial increase by gravity in the arterial flow to the ischemic extremity.

\*Presented at the meeting of the Middle Tennessee Medical Association, Shelbyville, Tenn., May 19, 1966.

<sup>†</sup>From the Department of Surgery, Vanderbilt University Hospital, Baptist Hospital and St. Thomas Hospital, Nashville, Tenn.

The patient often accomplishes this result by sitting with feet dependent or hanging the embarrassed foot over the edge of the bed for hours at a time. This unfortunate habit, although giving some temporary relief, results in a vicious cycle of edema with increased ischemia and more pain leading to more dependency. Elevation of the head of the bed provides an optimal increment in flow by gravity but usually without edema.

Although seemingly obvious, it is surprising how many of these patients are unaware of the dangers of applied external heat even if this be only of mild degree such as from a heating blanket. The increased metabolic demand of the warmed tissue is more than the critically balanced circulation can supply and tissue loss can occur. I have had the experience in more than one case of a major amputation forced by the injudicious use of heat. The patient should be instructed to use only a heavy sock or blankets for warmth.

Abstinence from tobacco, especially cigarettes, is of great importance in the management of these patients. Lord<sup>1</sup> has demonstrated a much higher incidence of occlusive arterial disease in smokers than in nonsmokers. Whereas less than one-third of patients with intact arterial circulation in the leg were heavy smokers, well over 90% of those requiring arterial surgery smoked heavily. I have rarely seen a nonsmoker under 65 with significant occlusive arterial disease. Smoking would appear to hasten significantly the onset and increase the severity of these arterial blocks.

Vasodilator drugs such as nylidrin (Arldin) or tolazoline (Priscoline) appear to have some limited value in vasospastic diseases such as Buerger's disease and the diabetic form of arteriosclerosis, though in both these categories the presence of underlying organic occlusion renders them disappointing in the usual case. The value of long term anticoagulation with prothrom-

bin-inhibiting agents is difficult to assess but it is my opinion that the disadvantages of this modality outweigh any slim benefits that may accrue.

#### The Role of Sympathectomy

Generally considered, sympathectomy is of benefit only in the presence of vaso-spasm. In purely mechanical blocks it cannot be expected to result in either limb salvage or lowering of the level of amputation. This failure is borne out in experience, particularly in arteriosclerotic occlusion. Occasionally, the purely vasospastic disorders affect the lower extremity to a sufficient degree to require sympathetic denervation (Table 2). Livedo reticularis is character-

sympathectomy is generally attended by very good results. It is probable that venospasm as well as arteriospasm plays a significant role in this unique disorder. Although Raynaud's disease (as contrasted to the more common Raynaud's phenomenon) affects the lower extremity less commonly than the upper, foot involvement is very effectively treated by lumbar sympathectomy, as the 600 cases collected by Kinmonth<sup>2</sup> would indicate.

One of the more important indications for sympathectomy is Buerger's disease (Table 2). Although organic blocks exist in many of these patients, the vasospastic element is strong enough to account for much of the necrosis and gangrene which occurs. The results, particularly of lumbar sympathetic denervation, are often satisfactory for long periods of time as figure 1 would indicate. This patient underwent both dorsal and lumbar sympathectomies many years ago and still has very functional feet in spite of the loss of many fingers.

Many diabetics with ischemic lesions of the lower extremity do not benefit from sympathectomy. However, in younger diabetics this procedure may be of help. Figure 2 demonstrates a superficial femoral artery block in a 45 year old diabetic. Operative repair of this lesion did not relieve the pre-gangrenous condition of his toes in

Table 2

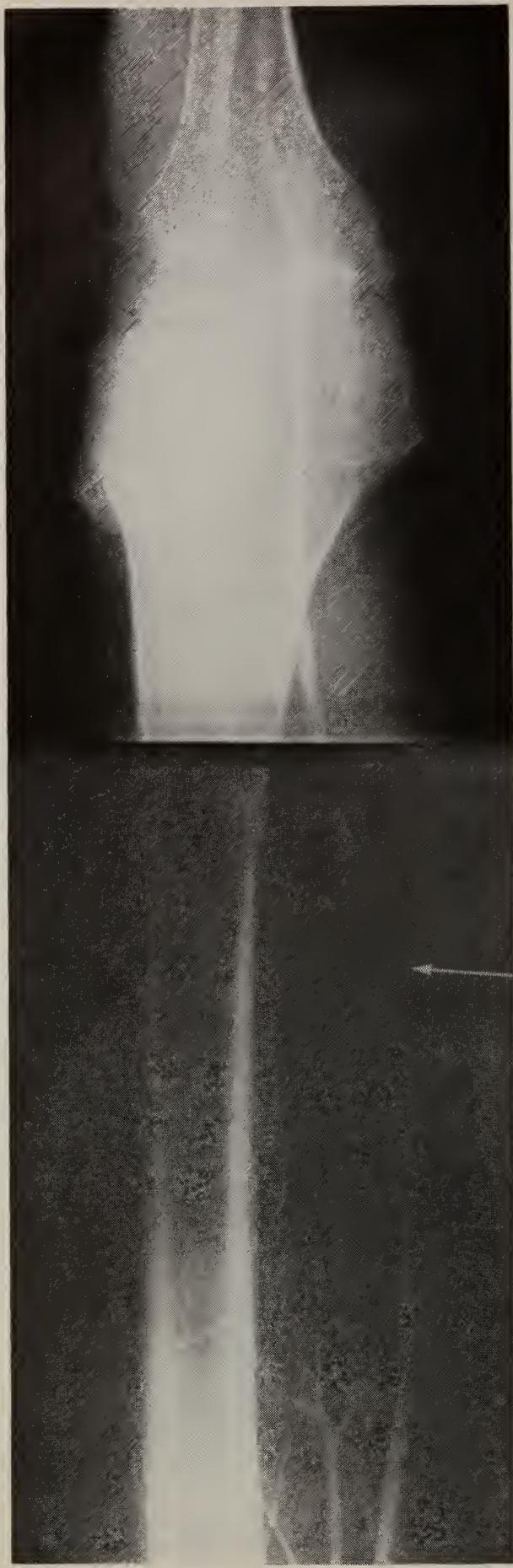
#### SYMPATHECTOMY BENEFICIAL IN:

1. Vasospastic disorders
  - a. Livedo-reticularis
  - b. Raynaud's disease
2. Organic blocks with strong vasospastic component
  - a. Buerger's disease
  - b. Diabetic type arteriosclerosis (in some cases)
3. Injury
  - a. Frostbite
4. Usually not indicated in arteriosclerosis

ized by a bluish mottling of the skin of the lower extremities and only rarely results in ulceration or gangrene of sufficient degree to require sympathectomy. When required,



FIG. 1. This 62 year old patient with Buerger's disease had bilateral lumbar and dorsal sympathectomies 13 years ago. Although his feet have remained in good condition, necrosis of finger tips has necessitated many amputations.



spite of a repair known to be patent. Following sympathectomy, however, the color of the toes improved and the dead sloughed off leaving a healed base.

True frostbite is often associated with loss of varying amounts of tissue and can result in disability due to cold sensitivity and pain. Studies by Shumacker<sup>3</sup> would indicate, however, that sympathectomy done early in the course of the disease limits the level of amputation and results in conserving tissue. Here, then, we have another indication for lumbar sympathectomy.

#### Indications for Direct Arterial Surgery

Patients in whom conservative therapy is ineffective are often not helped by sympathectomy, though a very high percentage of these can benefit from direct reconstructive procedures. It is in this area of indications for direct arterial surgery that some of the greatest clarification has occurred in recent years (Table 3).

Table 3

#### INDICATIONS FOR DIRECT ARTERIAL SURGERY

1. Threatened amputation.
2. Symptoms which interfere with productivity.
3. Must have a suitable distal tree.
4. Mere presence of lesion not enough.

The threat of amputation certainly justifies any reasonable effort to reconstruct arterial inflow, particularly if the amputation is to be a major one. Even gangrene of a toe in an arteriosclerotic patient may require an above-knee amputation if nothing is done to improve tissue perfusion. Similarly patients with ischemic night pain often demand amputation since even narcotics fail to relieve the agony of this most impressive symptom. A less demanding but equally persistent cause for amputation can be the unhealing lesion of the foot or ankle (Fig. 3). Such a lesion often produces pain at rest if such was not already present. Although the extent of occlusive disease may be great in these patients, most or all should be evaluated by arteriography and

FIG. 2. This 45 year old diabetic had repair of the stenotic area in the superficial femoral artery. Pregangrenous changes of the toes persisted, however, until relieved by sympathectomy.

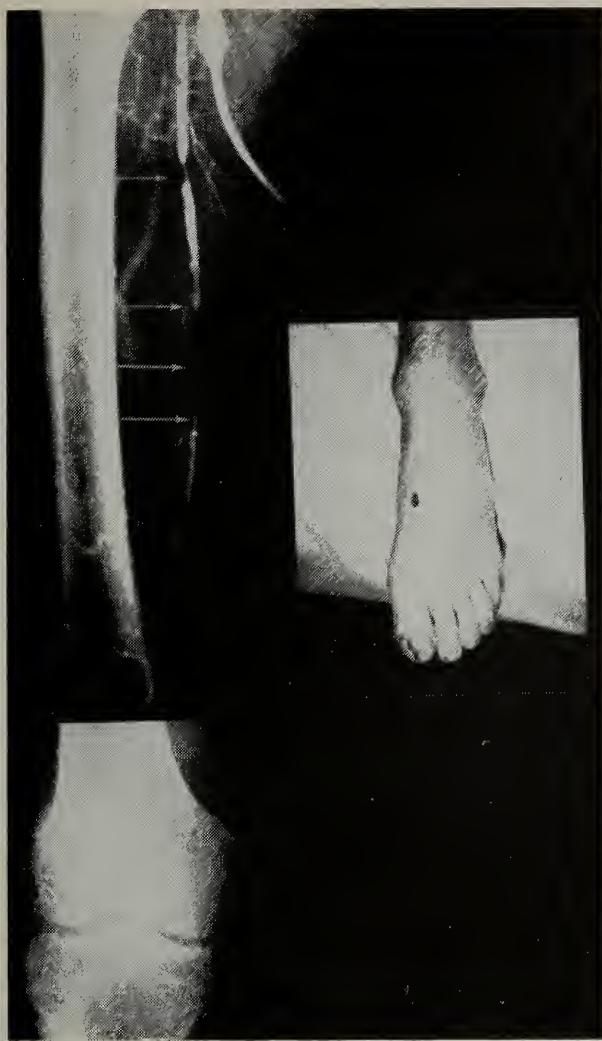


FIG. 3. This 58 year old man developed this painful lesion on the foot which would not heal; nocturnal pain became increasingly severe. Arteriogram shows multiple blocks in the femoral artery. Healing was prompt after vein grafting.

any reasonable extremity-saving effort be carried out.

Claudication alone is not necessarily an indication for surgical intervention unless severe enough to interfere substantially with work. The patient shown in figure 4 had a total aorto-iliac occlusion (Leriche syndrome). Although there was no evidence of necrosis or gangrene of the lower extremities, his claudication was sufficient to interfere substantially with work and to require surgical relief. Aorto-iliac bypass grafting completely relieved this complaint and was incidentally noted to improve his flagging libido. Moderately severe claudication will occasionally improve substantially merely with time, and patients must

be evaluated individually with regard to this symptom.

Some patients can be shown by arteriography to have no suitable distal vessel in which a reconstruction can be terminated. Although with increasing experience these patients become less common they continue to appear, especially in the older age groups, and represent a group for which reconstruction is not feasible.

Although many symptomatic patients have reparable occlusive lesions, their mere presence is insufficient to justify an operation. Figure 5 demonstrates a complete block in a patient with claudication. Because of this man's sedentary occupation, however, he has been successfully carried on conservative management without any aggravation of symptoms.

#### Types of Operative Procedures

The procedures available to shunt blood through or around a blocked artery are outlined in table 4.

Table 4

#### ARTERIAL RECONSTRUCTIVE PROCEDURES

1. Thromboendarterectomy with or without patch graft.
2. Vein graft.
3. Synthetic tubes.
4. Embolectomy.

Thromboendarterectomy is especially

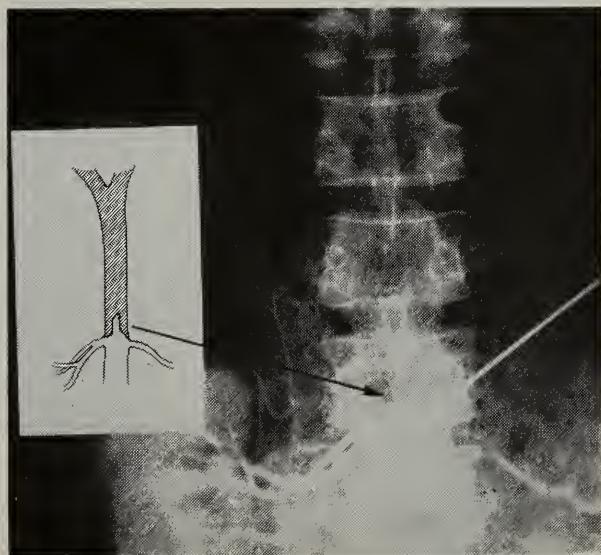


FIG. 4. The drawing shows diagrammatically the extensive block in this 43 year old man's aorta and common iliac arteries. Aorto-iliac bypass grafting relieved his claudication.

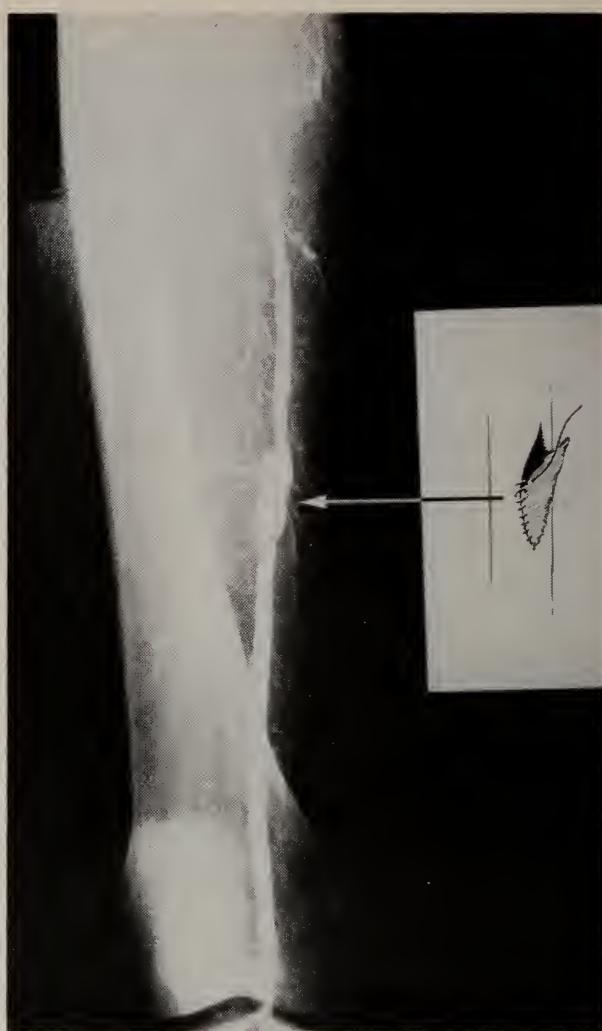
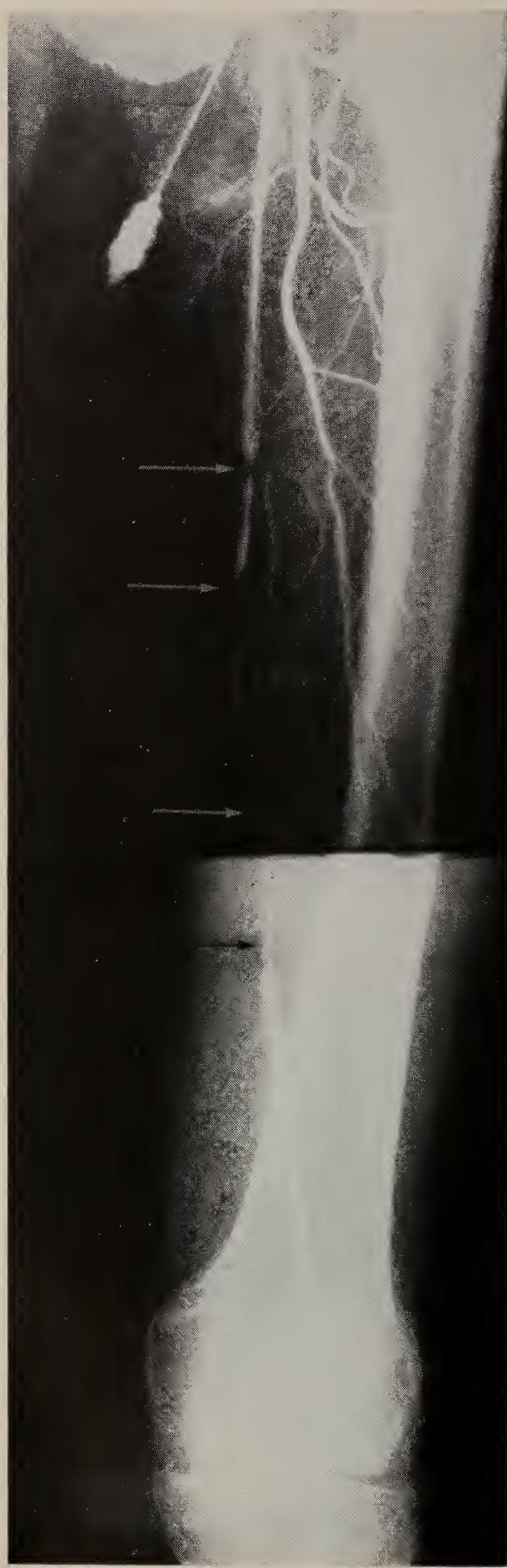


FIG. 6. After removal of the occluding intimal plaque, a patch of vein is applied, as shown in the diagram, to avoid a suture-line stenosis. The postoperative arteriogram shows such a patch in place.

effective in removing short blocks and has the advantage of being an entirely autogenous reconstruction without use of foreign material. The use of a patch implanted in the suture line to avoid stenosis is demonstrated in figure 6. The relative merits of various materials for use as a patch has been extensively worked out.<sup>4, 5</sup> Although many substances can be used satisfactorily, the usual choice is the patient's own vein.

Bypass grafting with saphenous vein has been extensively used by Dale<sup>6, 7</sup> and others. In this operation the patient's own ipsilateral saphenous vein is removed, reversed

FIG. 5. The complete block in this 60 year old man's femoral artery caused claudication, but did not require operative repair.

and sutured about the arterial block as a shunt of entirely autogenous material. As the disadvantages of synthetic materials have become more and more obvious, this method of repair has come into increasingly widespread use, and is particularly valuable in patients with long or multiple blocks (Fig. 3). Although this technic requires more skill and experience than any other mentioned here, its use is attended by gratifying results.

The many synthetic materials designed for bypass grafting all carry the compound disadvantages of decreased tolerance to infection, a thick neo-intima of fibrin, tendency to kink at joints and inferior results in regard to long term patency and limb salvage. The technical fact of ease of insertion is entirely offset by these disadvantages. Indeed, of what value is it to the patient for the surgeon to finish one hour sooner if an otherwise avoidable amputation results a few weeks or months later?

Arterial embolism can usually be dealt with by arteriotomy, extraction of the embolus and direct repair by suture. The introduction by Fogarty<sup>8</sup> of a balloon-fitted arterial catheter has made possible extraction of emboli distant from the arteriotomy and has further enhanced limb salvage following embolization.

### Results

Where formerly a patient requiring reconstructive arterial surgery carried a somewhat guarded prognosis, it is now possible to state with considerable more clarity the anticipated outcome of repair. Those patients with a short block in a large vessel and a relatively intact distal arterial tree carry a very good prognosis. As the runoff becomes poorer or as the distal anastomotic vessel becomes smaller the chances of a successful outcome are less. However,

even many of these limbs are salvaged and such patients are usually willing to undergo an attempt at saving an otherwise doomed extremity. Even in the presence of gangrene of a toe, a threatened major amputation can often be replaced by a minor amputation saving a portion or most of a foot.

### Conclusions and Summary

Neither palliative nor reconstructive arterial surgery is indicated when occlusive vascular disease can be managed satisfactorily by conservative means.

Sympathectomy, although limited in usefulness, continues to have a role in some patients with ischemic feet and legs.

Both the role of direct arterial surgery and results to be anticipated therefrom have become greatly clarified in recent years. Representative cases are cited and illustrations of lesions and results are shown.

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## CASE REPORT

### Early Ocular Manifestations of Periarteritis Nodosa\*

Alice R. Deutsch, M.D., Memphis, Tenn.

#### Introduction

Polyarteritis or periarteritis nodosa, is a relatively rare disease which was diagnosed and described on the basis of histologic findings by Kussmaul and Meier<sup>1</sup> as early as 1866. A macroscopic and clinical description was given by Rokitansky<sup>2</sup> before this, in 1852. The disease is characterized by the formation of multiple inflamed nodules on and in the wall of smaller arteries, and occasionally on arterioles throughout the body. No specific organ has been found nor has infection been considered as a cause, though temporarily a viral origin has been suspected. Nor has there been evidence of endocrinopathy or a dietary deficiency.

Rich and associates<sup>3</sup> believed the disease represented a hypersensitivity-reaction. They produced typical periarteritis nodosa experimentally in rabbits analogous to serum sickness in man. They also presented clinical and pathologic evidence that polyarteritis developed in man as a result of a hypersensitivity reaction following the combination of a foreign serum and sulfonamide therapy, and that continued administration of this combination after a hypersensitivity reaction, increases the danger of producing vascular damage by prolonging the contact of the sensitized body with the offending antigen. Acute diffuse glomerulonephritis occurred in a number of rabbits which developed a hypersensitivity reaction to foreign serum.

Clinically, polyarteritis is characterized by fever, loss of weight and anemia, myalgias, subcutaneous nodules, severe intestinal upsets, and peripheral neuritis. However, any organ of the body can be involved, though most commonly lesions are found in the gastrointestinal tract, kidneys, nervous system, skin and heart. Severe hypertension may accompany renal involvement.

\*Read at the meeting of the Tennessee State Academy of Ophthalmology and Otolaryngology, April 18-19, 1966, Gatlinburg, Tenn.

Histologically, periarteritis nodosa presents a localized, rarely generalized vasculitis, of small arteries with initially swelling of the ground substance of the connective tissue and by increased visibility and thickening of the collagen fibers. Later, infiltration with leucocytes takes place, often preceded by mononuclear cells and followed by eosinophils. Splitting of the media occurs early, followed by fibrinoid degeneration and necrosis, and occasional healing and scar formation.

Polyarteritis is a rare and usually fatal disease; and because of its baffling symptomatology, the diagnosis frequently is not made during life unless a biopsy has been made of muscle or a subcutaneous nodule. Since medium and small arteries in almost any part of the body can be involved, its signs and symptoms may be very variable. The disease occurs most often in males of middle age, though it has been reported in children as young as 3 months. The oldest patient observed was 78. The disease lasts from a few months to 1 year, and only an occasional patient survives for several years. Ocular manifestations are not characteristic and may masquerade as several other disease entities. Even if the disease is suspected clinically, it may be very difficult to prove. Death commonly occurs from hemorrhage or failure of a vital organ.

#### Ophthalmologic Manifestations

Polyarteritis may affect the eyes in various ways:—namely, by direct involvement of the medium sized and small arteries of the eye or the orbit; by exudative lesions of mesodermal structures; by involvement of the cerebral vessels with secondary neurologic manifestations; by kidney involvement and hypertension with resulting hypertensive retinopathy; and by various toxic contributing factors.

Exudative lesions of mesenchymal tissues have been seen in the form of palpebral swelling, edema of the conjunctiva, scleritis, iritis, episcleritis, and tenonitis. Typical lesions in the retinal arteries only are found rarely, and the clinical picture of retinopathy is considered to be a sequela of the renal disease and hypertension. Vascular lesions in the choroid, visible as globular

lar edematous areas of various size, have been proven pathologically, especially around the short posterior ciliary arteries and sometimes in the anterior uvea. The media is seen to be destroyed by fibrinoid necrosis, while the adventitia shows a very dense cellular infiltration; some vessel walls may be replaced entirely by a fibrinoid mass which also may fill the lumen of the vessels. The choriocapillaries also may show characteristic pathologic changes, the capillary walls being replaced by fibrinoid necrotic rings. The pigment epithelium demonstrates secondary degeneration. Some of the choroideal arteries show transformations to granulomas of histiocytes and fibroblasts. The outer layer of the retina may show autolytic changes. The frequent changes in the retinal arteries are considered to be sequelae of renal and circulatory disorders, but not caused by local polyarteritis.

The retinal abnormalities consist of active spasm, hemorrhages, cottonwool patches, and edema of the retina and disk. The latter might also be a sign of a toxic retinopathy, a nonspecific change found not only in other collagen diseases, but also in subacute bacterial endocarditis and septicemia.

Periarteritic lesions in the central nervous system may be the origin of palsies of the extraocular muscles, pupillomotor disturbances, homonymous hemianopsia and convulsions. Increased intracranial pressure may cause papilledema.

At autopsy, the lesions of periarteritis nodosa have been found in the choroidal, short and long ciliary arteries and their branches in the iris, in eyes which never had shown clinical manifestations of this disease, proving that polyarteritis nodosa may cause more ocular lesions than suspected clinically.

Because of the rarity of primary ocular involvement in polyarteritis, the following case is thought worthy for reporting.

*Case Report.* A 58 year old white woman had recurrent attacks of bilateral episcleritis alternately and simultaneously with the formation of phlyctenular-like nodules throughout 1956 and 1957. There was surprisingly little pain and photophobia. Her general health was considered to be good and the physical examinations were entirely negative.

In August, 1957, she complained of impaired vision in the left eye. At this time the anterior segment of both eyes were normal except for some limbal scarring. The media were clear. The fundus of the right eye showed isolated small greyish-yellowish lesions not sharply outlined, in the choroid. The left fundus was studded with similar lesions. In addition, very small white glittering dots of exudate made a string over the nasal superior retinal artery which was covered with a thick white exudate at its first bifurcation. This section of the retina was diffusely edematous and a corresponding relative field defect could be outlined. Corrected vision was: Right eye 20/20, left eye 20/25.

Physical examination was repeated in combination with detailed studies concerning a possible collagen disease, with polyarteritis foremost in mind. Blood chemical studies of albumin/globulin ratio, BUN, uric acid and cholesterol, as well as the hemogram, E.S.R., and x-ray examinations were within normal limits.

Under systemic steroid treatment the lesions subsided as did the external inflammations under local steroid therapy. In September, 1959, a severe nodular scleritis appeared anterior to the left internal rectus muscle with extensive scleral necrosis. This healed with pronounced scleral atrophy. At this time a muscle biopsy was again negative.

The patient was not seen again until April, 1960, when she complained of impairment of vision, weakness, headaches and abdominal discomfort. At this visit, she appeared ill, having lost much weight. The signs and symptoms of a hypertensive retinopathy were present. Corrected vision was still 20/25 in both eyes; I.T. both eyes was 20.1 (7.5 Schitz). The B.P. was 200/110, total plasma protein was 5.7, with an albumin/globulin ratio 2.3/3.4 E.S.R. 85, serum alkaline phosphatase 21 King-Armstrong units, and uric acid 3.6 mg. After several days in the hospital she developed a sudden intestinal obstruction which led to laparotomy. The diagnosis polyarteritis was made from the surgical specimen.

She died about 2 weeks later. Autopsy was denied.

#### Comment

It is not possible to prove with any certainty that the recurrent and various manifestations of ocular disease in this patient were those of ocular polyarteritis, and the diagnosis can only be made presumptively in retrospect.

Ocular manifestations of this disease are very rare. In 350 cases summarized by Goldsmith,<sup>4</sup> 81% showed no involvement of the eye and the 19% with such involvement mainly had angiospastic retinopathy thought to be secondary to the renal disease and hypertension. In another review

by Stillerman,<sup>5</sup> only 10% of eye lesions were found in 550 cases of "collagen diseases."

Ocular manifestations as first signs of periarteritis nodosa are most uncommon. Harbert and McPherson<sup>6</sup> observed a case of bilateral severe corneal ulceration of the Mooren's ulcer type with scleral necrosis in 1947. They suspected periarteritis nodosa, but the diagnosis was not made during life.

Wise,<sup>7</sup> in 1952, observed 2 instances of intractable corneal ulcers shortly preceding the outbreak of other manifestations of the disease. These 3 cases occurred before cortisone was available, and the patients did not respond to the symptomatic treatment used at this time.

Maumenee<sup>8</sup> mentioned mild and severe episcleritis, nodular scleritis and Mooren-like ulcers as a complication of polyarteritis, dermatomyositis, and rheumatoid arthritis. At microscopic examinations of necrotic scleral lesions, he found evidence of fibrinoid degeneration and phagocytosis of the fragmented collagen fibers by monocytes.

Boek<sup>9</sup> summarized the ocular findings in periarteritis nodosa, recognized in 1955. He emphasized that some types of lesions can be traced definitely to local periarteritis of ocular, retro-ocular, and peri-ocular arteries, while other pathologic entities unmistakably are the result of kidney disease and/or vascular disturbances in other organs.

Sheehan,<sup>10</sup> in 1958, reported a case of a 35 year old woman who, in addition to retinal perivasculitis and iridocyclitis, had varied neurologic findings. During the terminal stage of her illness she had intermittent fever, inversion of the albumin/globulin ratio and epileptic seizures. The post-mortem findings indicated a disseminated undetermined form of a generalized vascular disease, while the pathologic examination of the eye revealed active periarteritis nodosa.

Vancea<sup>11</sup> and associates discussed the history of a 31 year old man in 1962. He had progressive retinopathy and died following fulminating glomerulonephritis. Necropsy confirmed the diagnosis periarteritis nodosa.

Stephen Van Wien<sup>16</sup> observed a 61 year

old white man with a history of having had an orbital tumor removed 14 years previously. At that time the diagnosis periarteritis nodosa was made from the removed tissue. He was symptom-free until the exophthalmos recurred simultaneously with a severe intraocular hemorrhage and glaucoma. The diagnosis of periarteritis nodosa was confirmed again after enucleation. The patient died of renal failure few weeks later.

Blodi<sup>12</sup> reported the case history and pathologic findings of a 64 year old woman with bizarre clinical symptoms, a globular retinal detachment and diffuse attenuated arteries. Active polyarteritis was found only around the episcleral and orbital vessels. Otherwise, the histologic sections showed hypertensive retinopathy with edema of the macula and disk and retinal detachment.

The patient described herein was without signs of generalized disease for about 4 years. She never had evidence of involvement of the skin or other organ, and considered herself to be in good health until the final episode. Physical examinations and laboratory studies were repeatedly negative. Muscle biopsy after the recurrence of necrotizing scleritis in 1959 was not contributory. She made a good recovery after the several attacks of ocular disease as she responded favorably to cortisone treatment. The terminal severe retinopathy probably must be referred to the concomitant kidney disease and hypertension. Therefore, this would present an indirect involvement of the eyes, while the scleral, limbal and choroideal lesions in the preceding years might have been the result of specific local arterial diseases. The characteristic degenerative changes and cellular infiltrations have been described in the anterior and posterior ciliary arteries and their branches even in specimens where ocular involvement had not been suspected. The posterior short and long ciliary arteries and anterior ciliary arteries are considered to be a favored location of periarteritis nodosa.

At the other hand, in a large number of instances ocular lesions should be accessible to direct observation. Choroidal disease is very suggestive clinically, and is character-

ized by the absence of severe functional embarrassment. The discovery of suggestive pathologic lesions in the vascular structures of the eye, especially in the absence of other specific etiologic factors might signal a warning of polyarteritis and lead to more detailed study and essential laboratory investigations. These might aid in earlier diagnosis, earlier treatment, and possibly a more propitious prognosis.

### Summary

(1) The case history of a 58 year old woman with recurrent attacks of scleritis, keratitis, choroiditis, and terminal retinopathy was presented. In spite of detailed laboratory studies, the suspected diagnosis of periarteritis nodosa was confirmed only shortly before her death by the surgical specimen obtained at laparotomy.

(2) The specificity of the lesions in the eyes could not be confirmed, since they could not be obtained for pathologic study, autopsy having been denied.

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## CASE REPORT

### Amyloid Tumor of the Conjunctiva and Eyelid\*

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Primary isolated amyloid tumor of the eyelid is rare, only a few cases having been reported in recent years.<sup>1-3</sup> The disease was first described by Oettingen in 1871, and mention was made of it by Fuchs in 1919, de Schweinitz in 1921, Collins and Mayon in 1925, Wolff in 1934 and Castroviejo in 1946, as appears in a historical review by Mathur and Mathur.<sup>3</sup>

### Definition and Classification

Amyloidosis is described as an obscure disorder characterized by the deposition in various tissues of an amorphous glycoprotein soluble with difficulty and having its own peculiar staining reactions, with iodine, sulphuric acid (10% solution) and other stains (crystal violet).<sup>4</sup> Hyaline deposits are of a similar amorphous nature, but do not have the staining characteristics of amyloid.

Classification of amyloid disease is not very sharp or well defined. Generally, as of now, four groups or types are considered.

(1) Primary systemic, involving tissues of multiple organs, such as the larynx, tongue, bronchi and heart, without association with other disease, necessarily. In this type of case the patient survives an average of 3 years and usually dies of intractable cardiac decompensation.

(2) Secondary, accompanying a number of chronic diseases, especially suppurative diseases such as tuberculosis, pyelonephrosis, peritoneal abscess, lung abscess, etc. The liver, spleen, kidneys, adrenal cortex, thyroid and pancreas are involved most frequently.

(3) Amyloid disease accompanying multiple myeloma.

(4) Tumor forming lesions, as in the eyelid, wherein there is little or no tendency for it to be a complication of other disease. Some authors reporting cases of this type

\*Read at the meeting of the Tennessee State Academy of Ophthalmology and Otolaryngology, April 18, 19, 1966, Gatlinburg, Tenn.

from India, have suspected a relationship to trachoma.<sup>3</sup> This is far from certain, however, when one recalls that in some areas of India about 80% of the population have been affected by trachoma, and, also, that some of the cases reported from that country have shown no trace of trachoma. It should also be remembered that so-called "primary amyloidosis" is presumably a manifestation of some obscure metabolic disorder, and in this sense is actually secondary.

### Tumors of the Lid

Amyloid tumors of the lid are almost always local, and only very rarely are a part of a systemic primary disease involving other organs.<sup>5</sup> In about two-thirds of the cases the disease is bilateral and may involve one or all of the lids. There are usually complaints of tearing and irritation. In some instances, vision may be obstructed because of the size or weight of the tumor.<sup>2</sup> The bulbar conjunctiva and cornea may be involved. The levator muscle has been known to be involved in upper lid cases.

Grossly, the tumor appears as a firm, nodular or cobblestone-like, yellowish mass. Malignancy may easily be suspected.

Microscopically, the disease characteristically attacks the extracellular tissue elements or, in other words, the subconjunctival-pretarsal connective tissues. This includes the connective tissue supporting elements of the walls of blood vessels which are involved very early. The vessel walls become thicker from deposition of amyloid, and the lumen smaller as the process continues. The epithelium tends to remain intact. There is a minimal cellular reaction, usually characterized by round cell infiltration about the blood vessels. The end result tends to be an amyloid mass, relatively avascular and acellular, with intact epithelium, unless late in the process.

### Case Report

A white man, aged 49, was first seen on May 13, 1965, complaining of a growth inside the left lower lid, for about the past month. One morning he had noticed a slight "hemorrhage" on the pillow. There was no discomfort except a tendency to tearing. His chief concern was the presence of the mass in the lid.

The patient had been seen 8 months before for

routine examination and refraction, at which time no unusual findings were present.

*Examination.* Vision corrected was c c 20/15 and Jaeger 2, for both eyes.

Externally, the right eye was normal and the left eye showed no more than a suggestive general redness. The left lower lid had a prominence about equal to a moderately large chalazion, though not quite so localized, and was centered at about the junction of the middle and outer third. Palpation gave about the same sensation as such a chalazion. On eversion of the lid, the lateral two-thirds to three-fourths of the surface was covered by a mass of yellowish tissue. The highest elevation, at about the junction of the middle and outer third, was firm, nodular and immovable. As the mass flattened out, especially nasally, a distinct cobblestone pattern was present. There was somewhat of a crater over the highest elevation. The lower conjunctival fornix was free of involvement. Though the distinctive color had not been seen before, malignancy was suspected, including the possibility that it may have originated in a meibomian gland—itself a rare condition.<sup>6</sup>

Pupillary reactions, muscle functions, ophthalmoscopic and slit lamp examinations were normal in both eyes. There was no evidence of trachoma or other disease.

The general physical examination was normal, including chest x-ray and electrocardiogram. Laboratory tests included sedimentation rate, urinalysis, WBC, and differential counts, hematocrit, hemoglobin, serologic tests for syphilis, total protein, albumin and globulin with its several fractions, and blood cholesterol. All were within normal range, except for a cholesterol level of 264 and an eosinophil count of 8%.

Biopsy was performed at the first visit and reported as amyloid tumor of the eyelid. The pathologist's report was as follows:

*Microscopic Description:* "The conjunctival epithelium of the lid is very thin. The subepithelial connective tissue has been completely replaced by an eosinophilic homogeneous waxy material which completely replaces the supporting connective tissues. This material is not accompanied by any inflammatory or neoplastic changes. Capillaries are still visible within the material. Occasional connective tissue fibers can also be identified. Some lid gland ducts are also found. Because of the resemblance of this material to amyloid, a crystal violet stain was performed and this material stained a reddish-pink, consistent with amyloid. The lesion, therefore, will be diagnosed as an amyloid tumor of the lid." *Diagnosis—*"Amyloid tumor, left lower lid."

*Treatment.* (No specific treatment for this type of lesion is known. Corticosteroids have been used in reported cases but with little if any effect.) Nevertheless, topical prednisolone (Prednefrin-F) 1% drops every 3 hours were prescribed. In addition to this topical treatment, the proteolytic enzyme, Ananase, was given, 1 tablet

t.i.d. The treatment extended for several weeks because for a time the mass gave an impression of becoming less firm, more pliable, and possibly somewhat smaller. Failure of this treatment, however, became evident.

On August 31, 1965, under local anesthesia, the tumor was removed almost entirely by light curettement. The amyloid material came away easily and thus it was possible to remove it with very little injury to the uninvolvled tissues. Also, since the lower fornix was not involved, no consideration was given at the time to the use of a conjunctival or mucous membrane graft.

The palpebral surface healed rapidly, with almost complete absence of cicatricial reaction. To date, 7 months later, there is no recurrence.

**Comment.** The rapid healing, with almost no scar tissue reaction, was striking. It seems possible that this may coincide with the microscopic pathology, if it is recalled that the extracellular connective tissue elements are attacked primarily and replaced by amyloid substance. This includes the blood vessel wall, with thickening, stenosis, and occlusion of the vessel. This relative lack of blood vessels and connective tissue,

may leave a field less subject to scar tissue reaction. Consequently, in the surgical treatment of such a case, there may be some justification in removing amyloid material alone, with as little trauma as possible and, at the same time, hold some less concern than usual about the question of scarring or the necessity for grafting procedures.

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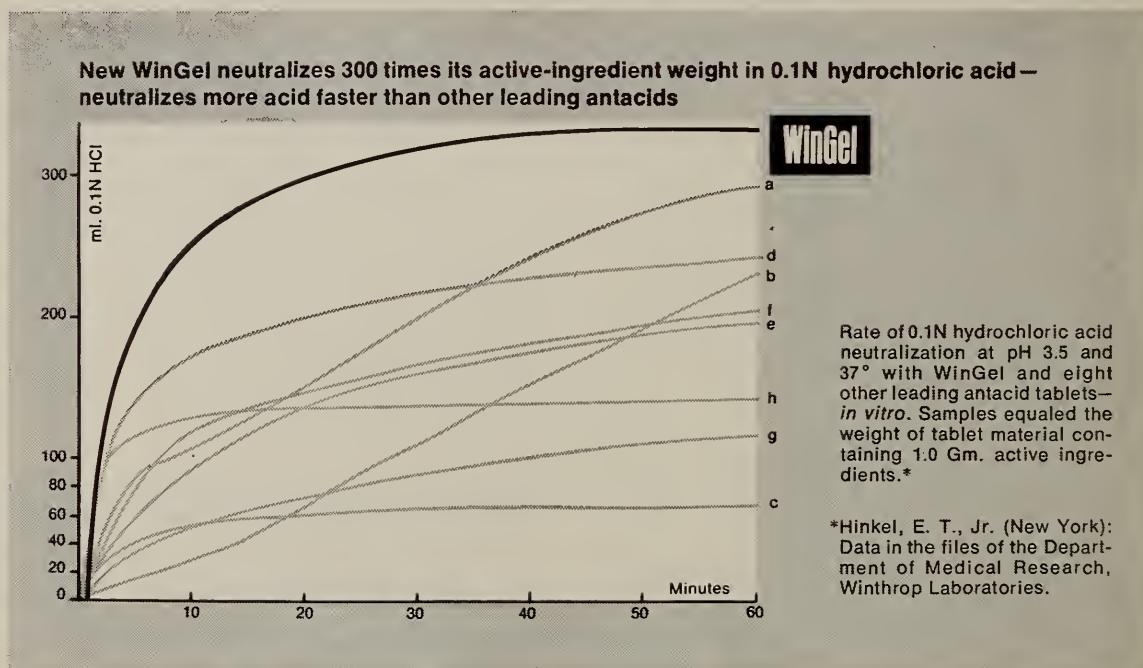
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# THE MEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### Survey of Radiologists And Pathologists in Tennessee

● Following is the result of a survey of radiologists and pathologists in Tennessee concerning separate billing and contractual agreements with hospitals. Questionnaires were mailed to 103 radiologists with 74 replies being received. Of these:

36 are now billing all patients directly and have no contract with hospitals;

15 are billing Medicare and/or selected other patients directly;

23 are not using separate billing at all, although most of them stated that they were in the process of converting to separate billing;

10 of the 15 who are using separate billing in part of their practice are in university status.

Of 90 pathologists who were sent questionnaires, 56 replied. Of these:

7 are on complete separate billing;

11 are using separate billing for part of their practice;  
38 are not using separate billing.

There was much stimulating and enlightening information given on the questionnaires under "additional comments." Some of those who are using separate billing are having little or no difficulty. Most, however, stated a loss in income and considerable opposition from hospitals and, to a lesser extent, from other physicians and patients. There was almost unanimous agreement that if the insurance companies, particularly the Blue Plans, could be persuaded to pay the fees of the pathologists and radiologists, transition to complete separate billing could be quickly accomplished with a minimum of difficulty.

● The American Medical Association's Board of Trustees has directed that the AMA, State, and County Medical Societies not implement a resolution which would make it unethical "for a physician to displace a hospital-based physician who is attempting to practice separate billing when the displacement is primarily designed to circumvent separate billing." The Board warned that implementation of the resolution adopted at the annual convention in June, "would involve significant legal risks." The Board stated that implementation of the resolution would involve serious risks of litigation (including damage claims by persons asserting economic injury). In a letter to delegates and alternate delegates of the AMA House, the AMA Board stated it has directed that AMA, State, and County Medical Societies not implement the resolution.

● The importance of establishing usual and customary fee concepts in welfare health care programs is found in Title XIX of the Medicare Act. Experts see the possibility of Title XIX covering thirty to forty percent of the popula-

### AMA Board Cites Legal Risk on Resolution

### Importance of Establishing Usual and Customary Fees

tion by 1972. This means, that unless usual and customary fees are established and maintained, physicians would find a large percent of their practice reimbursed under fixed fee schedules by 1972. The House Ways and Means Committee has held hearings as to the enormity of cost and size of Title XIX. It appears that restrictive amendments may be adopted.

**State and AMA  
Dues Change in  
1967**

- Effective January 1, 1967, TMA members are advised that the House of Delegates in its regular meeting in April, set the annual dues of the Tennessee Medical Association at \$55.00 per year.

The AMA House of Delegates, at the 1966 annual convention, approved an increase in AMA dues at \$70.00 per year, effective January 1, 1967. The House action stated that the increase was necessary for AMA to meet the needs of members and carry out effectively its many programs.

**Animal Care Bill  
(P. L. 89-544)  
Becomes Law**

- The Animal Care Bill requires the Secretary of Agriculture to establish standards for the care, treatment, and transportation of animals destined for use in research laboratories and would include not only dogs and cats but also guinea pigs, monkeys, rabbits and hamsters. Animal dealers would be required to be licensed by the Secretary but the law would exempt farmers who, as an avocation, raise animals on their farms and sell them to research facilities. Research facilities will be required to be registered with the Secretary and to maintain extensive records on the use of experimental animals. In Tennessee, it is understood that this Law will be implemented through the State Department of Agriculture.

**October 16-22 Is  
Designated as  
Community Health  
Week**

- Mid-October has been designated as Community Health Week. County medical societies are urged to develop plans for this activity. The AMA has forwarded a letter to county medical society officers and others in regard to this matter. All county medical societies are urged to develop appropriate programs marking this fourth annual observance of community health week to encourage other members of the community health team to join with them in planning and carrying out activities. Primary objectives of this nationwide observance are to stimulate greater public awareness and appreciation of the wealth of health facilities and services which are available at the community level and to stress the health progress and medical advances which have been made locally through the united effort of all members of the community health team. The October 16-22 date is recommended for all societies who participate so that the maximum benefit can be derived from national publicity.

**AMA Limits Size of  
House of Delegates**

- The AMA House of Delegates adopted an amendment to the By-Laws that would limit the size of the House of Delegates to 250 delegates. The change allows one delegate for every 1,250 members if and when the House reaches 250 members. Present By-Laws allow one delegate for every 1,000 members.

The adopted amendment stipulated that no state association should lose a delegate because of the new delegate-member ratio.

**New IRS Tax Guide  
Issued for Income  
Tax Withholdings**

- The Internal Revenue Service has issued a revised Employers Tax Guide to be used in connection with the new graduated system of withholdings adopted by the Tax Adjustment Act of 1966. Provisions of the new system went into effect May 1. As the IRS points out, this Act makes no change in the amount of tax, merely in the amount to be withheld.

Physician-employers who have not already made this adjustment in regard to employees withholdings, are advised to contact the nearest Internal Revenue Service office for instructions, or to consult their accountant or tax advisor.

# Public Service

## THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

### Medicare Meetings Conducted By Equitable—TMA

- Five meetings across the state have been conducted to further explain the procedures involved in submitting claims under Part B of Medicare. With the assistance of TMA, Mr. Dick Johnson, Medicare Director for the Equitable Life Assurance Society, fiscal carrier for Part B in Tennessee, met with physicians in Kingsport, Johnson City, Paris, Dyersburg and Jackson during September. Attempts are being made to schedule additional meetings in Clarksville, Columbia, Shelbyville, Cookeville and Cleveland during the month of October.

Although four regional meetings on the subject were held in Memphis, Nashville, Knoxville and Chattanooga during the month of May, which were attended by approximately 1,000 people, the carrier is experiencing problems in processing physician claims in certain areas of the state.

Mr. Johnson reported that during July 731 claims were processed with the number growing to 7,618 in August. Claims in September averaged 700 per day. Approximately 65% of all claims received and processed thus far by Equitable have gone towards satisfying the \$50 deductible of patients with no checks being issued.

Dr. G. Baker Hubbard, president of TMA, in a letter to all TMA members is urging that physicians and their assistants responsible for submitting claims forms attend one of these additional meetings on Medicare.

### Legislative Committee Conducts Meeting

- The TMA Legislative and Public Policy Committee met in Nashville on September 11 to discuss matters pertaining to legislation which will be of interest to TMA during the 1967 Tennessee General Assembly.

The use of the "contact doctor" system employed in the past to keep legislators informed of TMA's position on proposed legislation regarding health care will be utilized once again. Individual physicians who treat legislators as patients and know them personally will be asked to serve as a contact doctor during the legislative session. Physicians acquainted with legislators expected to serve in the 1967 General Assembly are urged to get in touch with Mr. Williams of the TMA staff as soon as possible.

The feasibility of establishing a first-aid station in cooperation with the Tennessee Hospital Association is under consideration. The station, which will be located adjacent to the House and Senate chambers in the Capitol, would operate during legislative sessions. Staffing of such a station by a physician presents a problem. If plans materialize, TMA members will be requested to volunteer their services for one day to staff the first-aid station. The Legislative Committee is of the opinion that such an endeavor will provide a much needed service to members of the General Assembly, will afford TMA an excellent public service opportunity and will enable physicians from across the state to actively participate and to see the General Assem-

bly in action. Interested physicians who would be willing to serve one day during January, February or March are urged to contact Mr. Williams at TMA Headquarters.

The complete TMA legislative program for 1967 will be outlined prior to the January convening date.

## Title XIX

● Implementation of a Title XIX program in Tennessee is not far off. For better or for worse, the implementation of Title XIX must affect the future of medicine and the unprecedented quality of health services enjoyed by citizens of Tennessee. TMA is fully aware of the long range effects this comprehensive medical care program could have on its members and the patients they serve. Several policy statements have been adopted by the House of Delegates relative to Title XIX and all policy statements have been referred to state and national agencies responsible for the development of Tennessee's program. The TMA Governmental Medical Services Committee is responsible for all matters pertaining to Title XIX and its implementation.

To date, the following policy has been developed:

1. The Tennessee Medical Association favors the full implementation of Title XIX of P.L. 89-97 by the State of Tennessee insofar as fiscally feasible. The speed of accomplishment should be no greater than the State of Tennessee can afford in moving forward and still be fiscally responsible to maintain the program.
2. The Tennessee Medical Association strongly urges that the administration of Title XIX be placed under the jurisdiction of the Tennessee Department of Public Health. Title XIX is a medical program and should be administered by the state agency designed to implement medical programs. The Association urges that the program be under the direction of a full-time employed physician with as many full-time physicians as needed to adequately direct and supervise the program's implementation and operation.
3. The Tennessee Medical Association has adopted a policy which states that when any agency of the government assumes financial responsibility for an individual's health care, reimbursement for the physician's professional services should be on the basis of usual and customary fees, this provision being part of P.L. 89-97 and currently being followed under Title XVIII.
4. The Tennessee Medical Association feels that any recipient of medical aid under Title XIX should have free choice of physician and facilities available under the program. Every effort should be made to preserve the traditional physician-patient relationship. A provision which would allow the physician the option of dealing directly with the patient or with the fiscal carrier for the program as provided in Title XVIII of P.L. 89-97 should be incorporated in formulating Title XIX in Tennessee.
5. The Tennessee Medical Association strongly urges that, in order to effectively and economically establish Title XIX in Tennessee, the fiscal carrier for the state should coincide with the fiscal carrier designated by the Department of Health, Education and Welfare to administer Part B of Title XVIII. The designation of a different fiscal carrier for Title XIX would cause a complexity of problems and would confuse both physician and patient in establishing and maintaining an efficient and smooth operating program.

**Many overweight patients can benefit from the appetite control provided by the sustained anorexigenic-tranquilizing action of BAMADEX SEQUELS: anorexigenic action of amphetamine; tranquilizing action of meprobamate; prolonged action through sustained release of active ingredients.**

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**Contraindications:** Dextro-amphetamine sulfate: in hyperexcitability and in agitated prepsychotic states. Previous allergic or idiosyncratic reactions to meprobamate.

**Precautions:** Use with caution in patients hypersensitive to sympathomimetic compounds, who have coronary or cardiovascular disease, or are severely hypertensive.

Dextro-amphetamine sulfate: Excessive use by unstable individuals may result in psychological dependence.

Meprobamate: Careful supervision of dose and amounts prescribed is advised, especially for patients with known propensity for taking excessive quantities of drugs. Excessive and prolonged use in susceptible persons, e.g. alcoholics, former addicts, and other severe psychoneurotics, has been reported to result in dependence on the drug. Where excessive dosage has continued for weeks or months, reduce dosage gradually. Sudden withdrawal may precipitate recurrence of preexisting symptoms such as anxiety, anorexia, or insomnia; or withdrawal reactions such as vomiting, ataxia, tremors, muscle twitching and, rarely, epileptiform seizures. Should meprobamate cause drowsiness or visual disturbances, reduce dosage and avoid operation of motor vehicles, machinery or other activity requiring alertness. Effects of excessive alcohol consumption may be increased by meprobamate. Appropriate caution is recommended with patients prone to excessive drinking. In patients prone to both petit and grand mal epilepsy meprobamate may precipitate grand mal attacks. Prescribe cautiously and in small quantities to patients with suicidal tendencies.

**Side Effects:** Overstimulation of the central nervous system, jitteriness and insomnia or drowsiness.

Dextro-amphetamine sulfate: Insomnia, excitability, and increased motor activity are common and ordinarily mild side effects. Confusion, anxiety, aggressiveness, increased libido, and hallucinations have also been observed, especially in mentally ill patients. Rebound fatigue and depression may follow central stimulation. Other effects may include dry mouth, anorexia, nausea, vomiting, diarrhea, and increased cardiovascular reactivity.

Meprobamate: Drowsiness may occur and can be associated with ataxia; the symptom can usually be controlled by decreasing the dose, or by concomitant administration of central stimulants. Allergic or idiosyncratic reactions: maculopapular rash, acute nonthrombocytopenic purpura with petechiae, ecchymoses, peripheral edema and fever, transient leukopenia. A case of fatal bullous dermatitis, following administration of meprobamate and prednisolone, has been reported. Hypersensitivity has produced fever, fainting spells, angioneuritic edema, bronchial spasms, hypotensive crises (1 fatal case), anuria, stomatitis, proctitis (1 case), anaphylaxis, agranulocytosis and thrombocytopenic purpura, and a fatal instance of aplastic anemia, but only when other drugs known to elicit these conditions were given concomitantly. Fast EEG activity, usually after excessive dosage. Impairment of visual accommodation. Massive overdosage may produce drowsiness, lethargy, stupor, ataxia, coma, shock, vaso-motor and respiratory collapse.



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# President's Page

## Hospital-Based Specialists



DR. HUBBARD

It is unethical for a physician to dispose of his services where a third party has an opportunity to profit from the sale of his services. Ethics is a standard of conduct imposed on a physician by his fellow physicians, his patients, and especially by his conscience.

The National Associations of Pathologists and Radiologists recognize the many hazards of contractual relationships between their members and hospitals and they have requested organized medicine to support them in their efforts to terminate existing contracts.

In 1961, a resolution was introduced in the TMA House of Delegates to expedite this separation. Each time the House has passed a resolution to give help and direction to this effort, the TMA Council has tried to fulfill the measures adopted by the House. The Council has met many obstacles in their efforts to aid the hospital-based specialists but their courage and determination have not been daunted.

There are many explanations why progress has not been accomplished any faster. A fundamental reason is that hospital staffs have not been sufficiently educated about the real purpose for the change in the hospital-based physician's contractual relationships. Another determining factor is that there are many hospital-based specialists who are not interested in so-called "rocking the boat." In such instances, these physicians have satisfactory contracts and a good income, a pension fund, good working conditions, and feel that their patients are not exploited. Therefore they see no reason for change. They defy their national organization and organized medicine.

Finally there are many hospital-based specialists who have vision and can see the hazards of the present contractual relationships and know if they want to become independent physicians and not just compliant hirelings of the hospitals, they must do something soon. Many radiologists have disregarded economics and have changed their contractual relationship and are following direct billing. Pathologists sincerely desire a change but cannot visualize the manner of accomplishment without interfering with their many services. It is difficult for them to see how to separate the technical from the professional services, which presents a great problem.

The Government has made it clear that it is illegal for any medical group to exclude from its membership an otherwise acceptable physician only because he is replacing a physician who has broken his contractual relationship with the hospital.

There are two specific needs. The first is education. This is mainly for the hospital staffs to become cognizant of the importance of this change. The second is that the hospital-based specialists, through their own organizations, need complete orientation and convincing that they should change their contractual relationships and start billing their patients. The hospital-based specialists should discuss with their hospital staffs their working agreements in order to have the full backing of their associates.

Harmony in TMA is important—a united front is imperative—we need every M.D. in Tennessee an active member of organized medicine. I would challenge the societies of the hospital-based specialists to help in accomplishing these ends.

President

# THE JOURNAL

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OCTOBER, 1966

# EDITORIAL

## THE VIEWING BOX

Everyday is a full day, from early morning to often late at night, for the great majority of the members of the Tennessee Medical Association. What little time there may be for reading, after the busy doctor has cared for his patients and discharged his civic and church duties, and has attended the required hospital staff meetings and the meeting of the county medical society, is of necessity directed mainly to trying to catch up a little on new items in medical science or practice.

Unfortunately, therefore, he all too often relies upon casual reading of newspapers or other nonmedical news media for information upon what goes on in the nonmedical world but yet brushes his professional life, leave alone major affairs that press in on him as he discharges the duties and responsibilities of his life's work. If he is an officer of his county or state or other medical organization, he may include more de-

tailed reading from medical sources as part of his "home-work."

The officers of the county and state medical organizations are acutely aware of these reading habits of many members in the Tennessee Medical Association, and hardly a meeting of the Board of Trustees of TMA concludes without somehow a discussion or comment upon the need of better communication between the membership and the officers including the office of the Executive Director.

Each month the Executive Director and his staff write their yellow pages, the President composes his Page, and the Editor of the JOURNAL searches for a likely nonscientific medical topic for discussion, all directed toward informing the TMA's members of current developments which may touch his professional life. However, we recognize that what we may produce is just a "drop in the bucket" of what should be laid before the reader.

Much that is worthwhile appears in other medical journals and nonmedical magazines, and upon occasion excellent informative editorials appear in some of our sister publications. After much discussion, your Executive Director and Editor have thought an experiment in plagiarism to be worth a trial. Thus, the new section, *The Viewing Box*, is initiated in this issue.

The first subject is a consideration of *home care services*, "stolen" from the J.A.M.A. The topic is an appropriate one in anticipation of such care under Medicare, permissible after January first. Following this, we will from time to time bring to our readers the thoughts of others in the more or less nonscientific areas of medicine.

The possibilities are kaleidoscopic—health insurance, Food and Drug Administration, Medicare and Title XIX, Health and Hospital Planning, Regional Medical Programs, manpower shortages in nursing and other allied medical professions, mental health and disease, hospital problems, matters of medical education, medicolegal items, and the economics of medical practice. The list from which we might select informative reading is almost endless. It is our hope that our selections may broaden our attempts in extending interest and



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**BRISTOL THERAPEUTIC SUMMARY.** For complete information, consult Official Package Circular. **Indications:** Upper respiratory infections due to sensitive bacteria where concomitant symptomatic relief of fever, malaise and congestion is desired. **Contraindication:** A past history of hypersensitivity to one or more components. **Warnings:** Photodynamic reactions have been produced by tetracyclines. Natural and artificial sunlight should be avoided during therapy. Stop treatment if discomfort occurs. With renal impairment, systemic accumulation and hepatotoxicity may occur. In this situation, lower doses should be used. Tooth staining and enamel hypoplasia may be induced during tooth development (last trimester of pregnancy, neonatal period and childhood). **Precautions:** Antihistamines may cause

drowsiness and patients should not perform tasks requiring mental alertness while taking this agent. Bacterial or mycotic superinfection may occur. Infants may develop increased intracranial pressure with bulging fontanelles. In gonorrhreal therapy, serologic tests for syphilis should be performed initially and monthly for three months. **Adverse Reactions:** Glossitis, stomatitis, nausea, diarrhea, flatulence, proctitis, vaginitis, dermatitis and allergic reactions may occur. **Usual Adult Dose:** Two capsules q.i.d. Continue therapy for at least 10 days in beta-hemolytic streptococcal infections. Administer one hour before or two hours after meals.

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awareness of what touches our profession in the passing months.

R. H. K.

## DEATHS

**Dr. Riley J. Ingle**, 91, Sevierville, died August 26th in Sevier County Hospital.

**Dr. Frank L. O'Connor**, 60, of Chattanooga, died Wednesday in Tri-County Hospital.

**Dr. J. T. Moore**, 89, Algood, died September 6th at Vanderbilt Hospital in Nashville.

**Dr. R. L. Witherington**, 91, formerly of Cookeville, died August 8th in Clermont, Florida.

**Dr. Beverly Roy Howard**, 61, retired Kingsport physician, died August 27th at Holston Valley Community Hospital after a lengthy illness.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

### Memphis-Shelby County Medical Society

The Society met in the auditorium of the Institute of Pathology at the University of Tennessee on September 6th. The scientific program entitled, "Research at St. Jude" was presented by Dr. Donald P. Pinkel, professor of pediatrics, University of Tennessee, and Medical Director, St. Jude Hospital.

### Roane-Anderson County Medical Society

Dr. Arthur L. Kretchmar was guest speaker at the meeting of the Roane-Anderson County Medical Society, held in the cafeteria of the Oak Ridge Hospital on August 30th. His subject was "The Analogue Computer in Biological Research."

### Chattanooga-Hamilton County Medical Society

The scientific program for the meeting of the Chattanooga-Hamilton County Medical Society on October 4th was presented by Dr. Thomas C. Monroe and Dr. Maurice S. Rawlings. Dr. Monroe discussed "The Routine Use of the Episiotomy" and Dr. Rawlings' subject was "Diagnostic Compression Tests."

### Knoxville Academy of Medicine

Mrs. Bruce McCampbell, President of the

local Auxiliary, was a guest at the meeting of the Academy on September 13th, to outline the activities and work of the Auxiliary.

The scientific presentation was made by Dr. Allen Solomon, University of Tennessee Memorial Research Center and Hospital. Dr. Solomon's subject was "Gamma Globulins in Health and Disease."

### New TMA Staff Member



Mr. Morris M. Bradley, Nashville, joined the Tennessee Medical Association's headquarters staff as Administrative Assistant on September 15th. For the past three years, Mr. Bradley has been a disability examiner for the State Department of Vocational Rehabilitation. He fills a position on the TMA staff which has been vacant since November, 1965.

In his new duties, he will service a number of standing and special committees, conducting the planning, expediting and administrative activities of the committees and assist in performing the business and in conducting TMA's numerous programs. He will also assist in other special assignments.

Mr. Bradley is a native of Nashville, receiving his early education in Nashville public schools. He attended Peabody College where he received his Bachelor of Arts Degree in 1959. He served in the U. S. Army Medical Corps during the Korean War. He has held other positions in research, promotion, and administrative work prior to his affiliation with the Vocational Rehabilitation Department.

He resides with his wife and daughter on Langston Drive in Nashville.

## NATIONAL NEWS

### The Month in Washington

(From the Washington Office, AMA)

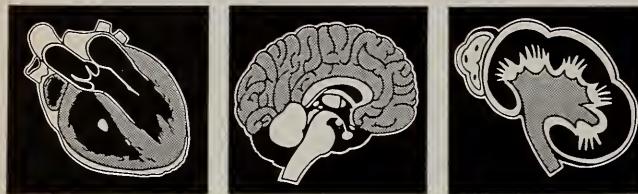
The Advisory Committee on Obstetrics and Gynecology to the Food and Drug Administration reported that in a nine-month

# *Behind continued high blood pressure readings lies the possibility of organic damage*

1-13

MANY OF THE aspects of essential hypertension are unpredictable—either because there are a number of mechanisms involved or because individuals differ in their responses to these mechanisms.<sup>1</sup>

There is one aspect of hypertension, however, that seems, in many cases, predictable. ". . . when the blood pressure is elevated to a marked degree for an adequate period of time, this in itself leads to perpetuation of the syndrome with resulting vascular damage throughout the body."<sup>14</sup> All too often the disease progresses until there is damage to one of three vital organs: the heart, the kidney, the brain.



"Hypertension is certainly a major factor in the genesis of coronary heart disease, and it is even more important when compounded with obesity."<sup>4</sup>

"[Vascular deterioration] can be clearly seen in the kidney with a degree of damage that can be measured by renal function studies."<sup>10</sup>

". . . most evidence suggests that reduction of blood pressure, when it is too high, not only relieves the heart of excess work but reduces vascular damage."<sup>11</sup>

"In short, treatment is indicated."<sup>11</sup>

Antihypertensive therapy will not restore the blood vessels to normal. Yet many of the vascular changes and symptoms caused by increased blood pressure may be arrested or alleviated when the blood pressure is reduced to normotensive levels.<sup>7</sup>

Reducing the blood pressure helps curtail further vascular damage and improves the prognosis — when damage is not too far advanced before therapy is started.<sup>14</sup> Essential hypertension is an indication not only for treatment, but for early and adequate treatment of the patient in question.

#### **Reduce the blood pressure with Rautrax-N**

Rautrax-N combines the antihypertensive-tranquilizing action of whole root rauwolfia with the antihypertensive-diuretic action of bendroflumethiazide in one convenient medication. The two drugs complement each other

so that smaller doses of both are possible.

Rauwolfia combined with bendroflumethiazide is particularly effective in long-term therapy,<sup>15-17</sup> since beneficial effects do not diminish with continuous daily administration.

For most patients 1 or 2 Rautrax-N tablets daily are sufficient for maintenance therapy. The simplicity, convenience and economy of such a dosage schedule are of particular benefit to older patients.

**References:** 1. Page, I. H., and Dustan, H. P.: The Usefulness of Drugs in the Treatment of Hypertension, in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 95. 2. Hollander, W.: The Evaluation of Antihypertensive Therapy of Essential Hypertension in Ingelfinger, F. J.; Relman, A. S., and Finland, M.: Controversy in Internal Medicine, Philadelphia, W. B. Saunders Co., 1966, p. 97. 3. Nickerson, M.: Antihypertensive Agents and the Drug Therapy of Hypertension, in Goodman, L. S., and Gilman, A.: The Pharmacological Basis of Therapeutics, ed. 3, New York, The Macmillan Co., 1965, p. 727. 4. Berkson, D. M.: Indust. Med. & Surg. 32:371, 1963. 5. Cohen, B. M.: M. Times 91:645, 1963. 6. Lee, R. E., et al.: Am. J. Cardiol. 11:738, 1963. 7. Moyer, J. H.: Am. J. Cardiol. 9:821, 1962. 8. Moser, M.: New York J. Med. 62:1177, 1962. 9. Wood, J. E., and Battey, L. L.: Am. J. Cardiol. 9:675, 1962. 10. Moyer, J. H., and Heider, C.: Am. J. Cardiol. 9:920, 1962. 11. Moser, M., and Macaulay, A. I.: New York State J. Med. 60:2679, 1960. 12. Judson, W. E.: Nebraska M. J. 44:305, 1959. 13. Hodge, J. V.; McQueen, E. G., and Smirk, H.: Brit. M. J. 1:5218, 1961. 14. Moyer, J. H., and Brest, A. N.: Hypertension Recent Advances, Philadelphia, Lea & Febiger, 1961, p. 633. 15. Berry, R. L., and Bray, H. P.: J. Am. Geriatrics Soc. 10:516, 1962. 16. Reid, W. J.: J. Am. Geriatrics Soc. 13:365, 1965. 17. Feldman, L. H.: North Carolina M. J. 23:248, 1962.

**Contraindications:** Severe renal impairment or previous hypersensitivity.

**Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting or G.I. bleeding occur.

**Precautions and Side Effects:** The dose of ganglionic blocking agents, veratrum or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Caution is indicated in patients with depression, suicidal tendencies, peptic ulcer; electrolyte disturbances are possible in cirrhotic or digitalized patients. Marked hypotension during surgery is possible; consider discontinuing two weeks prior to elective surgery and observe patients closely during emergency surgery. Rauwolfia preparations may cause reversible extrapyramidal symptoms and emotional depression, diarrhea, weight gain, edema, drowsiness may occur. Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients, and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, rashes may occur.

**Dosage and Supply:** Initial dosage, 1 to 4 tablets daily, preferably at meal-time. Maintenance, 1 or 2 tablets daily. Rautrax-N is supplied as capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin®), 4 mg. bendroflumethiazide (Naturetin®), 400 mg. potassium chloride.

**Also available:** Rautrax-N Modified — capsule-shaped tablets containing 50 mg. Rauwolfia serpentina whole root (Raudixin), 2 mg. bendroflumethiazide (Naturetin), 400 mg. potassium chloride. Both potencies available in bottles of 100. For full information, see Product Brief.

# **RAUTRAX-N**

Squibb Rauwolfia Serpentina Whole Root (50 mg.) with Bendroflumethiazide (4 mg.) and Potassium Chloride (400 mg.)

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study it could find "no adequate scientific data" that birth control pills are "unsafe for human use." But the committee said that there are "possible theoretic risks" in the use of oral contraceptives. For this reason, the committee recommended further, extensive tests to learn more about possible side-effects and to improve surveillance of the drugs.

The FDA accepted this proposal and other committee recommendations, including discontinuance of time limitations on use of oral contraceptives. FDA Commissioner Dr. James Goddard said the agency would like to start studies on up to 50,000 women next year and eventually on as many as 500,000 women. The biggest drug studies this far have involved only 20,000 or 30,000 women. "The committee finds no adequate scientific data, at this time, proving these compounds unsafe for human use. It has nevertheless taken full cognizance of certain very infrequent but serious side-effects and of possible theoretic risks suggested by animal experimental data and by some of the metabolic changes in human beings," the committee concluded.

"In the final analysis, each physician must evaluate the advantages and the risks of this method of contraception in comparison with other available methods or with no contraception at all. He can do this wisely only when there is presented to him dispassionate scientific knowledge of the available data."

The FDA said it would lift shortly its recommended limits on use of the "the pill." The agency has required that manufacturers state on their labels and advise physicians that the oral contraceptives should be used by individuals for no more than four years because of concern about the unknown long-term effect of the medications. FDA officials and the advisory committee agreed that there isn't any sound scientific rationale for the restriction, because of the current lack of data that would indicate that the pills are dangerous.

Other steps that FDA officials said would be taken as a result of the report include imposition of uniform labeling requirements on all types of oral contraceptives, elimination of product-by-product variations that

have confused physicians and allowed companies to make different promotional claims, and restrictions of the use of the products for some medical purposes, such as prevention of abortion and treating lack of menstruation or painful menstruation, as well as conception control.

"The oral contraceptives present society with problems unique in the history of human therapeutics," the committee said. "Never will so many people have taken such potent drugs voluntarily over such a protracted period for an objective other than for the control of disease. These compounds, furthermore, furnish almost completely effective contraception, for the first time available to the medically indigent, as well as the socially privileged. These factors render the usual standards for safety and surveillance inadequate. Their necessary revision must be carefully planned and tested, lest the health and social benefits derived from these contraceptives be seriously reduced. Probably no substance, even common table salt, and certainly no effective drug can be taken over a long period of time without some risk, albeit minimal. There will always be a sensitive individual who may react adversely to any drug, and the oral contraceptives cannot be made free of such adverse potentials, which must be recognized and kept under continual surveillance. The potential dangers must also be carefully balanced against the health and social benefits that effective contraceptives provide for the individual women and society."

"The oral contraceptives currently in use are probably not those that will be employed 10 or even five years hence. Drugs with even less potentially adverse effect, utilizable in smaller dosage, will undoubtedly be developed through continuing research."

The American Medical Association opposed legislation that would make prescribing drugs by generic name mandatory under the federal program of medical care for dependents of military personnel. The AMA expressed its opposition in a letter to a joint House-Senate committee that was considering such legislation. The letter said: "The generic name refers to the active

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chemical ingredient of the drug and not to the finished product which is supplied to the patient. In order that it may be dispensed, the trade-name manufacturer, by way of a specific formulation, processes the drug to its final form. For example, included in a manufacturer's preparation of a tablet form of a drug may be a number of variables such as the crystalline size, the nature of the excipients, the coloring agents and flavors, the tableting pressures, coating films, and the orientation within the tablet.

"Since the finished product, depending on who has manufactured it, may emerge in any one of several forms, it becomes apparent that a generic-named drug supplied by one manufacturer may differ to a significant degree from the same generic-named drug supplied by another manufacturer. Yet, if the physician is compelled to prescribe by generic name, he would have no control as to which drug is used by the pharmacist in filling the prescription.

"The coating, the disintegration time, the solubility, the choice of vehicle or base, these and other factors may be extremely important to the physician who chooses a drug for his patient. He must have the opportunity to specify that drug containing the variables he has found suitable to the treatment of his patient. Further, where his patient is receiving the same medication over a period of time, successive refills of the same prescription with products of different manufacturers, could lead to variations in therapeutic response which may mislead him.

"It has been suggested that generic prescribing would result in substantial savings. This may be true in some instances, but certainly not in all. Generic prescribing would allow the pharmacist to furnish the patient with that manufactured drug he, the pharmacist, has chosen. It may or may not be less expensive. In any event, it is the pharmacist who sets the final price.

"The argument of generic prescribing versus trade name prescribing has been heard at scientific gatherings, seen in scientific publications, and debated in the committees of Congress. But as to one element of the discussion, almost all physicians agree. For a variety of sound medical rea-

sions, the choice of whether to prescribe generically or by brand name should be that of the treating physician. No law should be passed which may compel him to use in every case, a generic or non-proprietary drug. Such a law would not be in the best interest of his patient."

## MEDICAL NEWS IN TENNESSEE

### University of Tennessee College of Medicine

Two top-level administrative changes within the College of Medicine have been announced by Dean M. K. Callison. Dr. Richard R. Overman, who has been serving as Assistant Dean for Research Affairs, has been named Associate Dean of the College. Dr. Overman will continue to have responsibility for research affairs, but in addition will assume general administrative duties. Dr. Robert A. Crocker, assistant professor in pathology, has been appointed Assistant Dean for Student Affairs. Both appointments follow the recent retirement of Dr. Frank L. Roberts, who is joining the staff of the Memphis-Shelby County Health Department. The changes were effective September 1.



Three physicians have been added to the faculty at the medical units. Dr. Michael Rytel has joined the Department of Medicine faculty as assistant professor. He will also be project chairman of a study on the mechanisms of resistance to viral infections for which a USPHS grant of \$29,000 has been received. Dr. Boyce M. Skinner and Dr. Harold M. West were recently appointed as instructors in the Department of Psychiatry.



Dean Roland H. Alden, School of Basic Medical Sciences, will serve as chairman of the Anatomical Sciences Training Committee of the National Institutes of Health, 1966-1970. The committee provides scientific guidance of research training grant programs of the Public Health Service.

Dr. R. N. DiLuzio, professor and chairman

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of the Department of Physiology and Biophysics, has been appointed a visiting professor in the Graduate School of the New England Institute, Ridgefield, Connecticut. The Interdisciplinary Graduate School of the Institute will award the Doctor of Natural Philosophy degree for individuals already possessing an initial doctorate. Dr. DiLuzio's appointment is for the period of 1966 to 1970.



The College of Medicine is scheduled to receive more than \$1,600,000 during the next four years under new federal legislation providing for "basic improvements" to medical schools. The funds will come from the new Health Professions Educational Improvement Act which Congress approved last session to help medical schools bolster teaching staffs and improve facilities. This year's allocation totaled \$133,875, and the figure for each of the next three years has been set at \$381,500. Approximately 40% of the funds received will go to the School of Basic Medical Sciences, where medical students receive their preclinical training. Additional faculty will be sought to strengthen teaching programs in cancer, gynecology, general surgery, urology, child psychiatry, and dermatology.

#### **Regional Medical Center To Be Established in Nashville**

Vanderbilt University School of Medicine and Meharry Medical College will cooperate in a joint planning project for establishing a regional medical center in Nashville, to be used for the treatment and research in the fields of heart disease, cancer, stroke and related diseases. An initial grant of \$265,841 for the first year of two years of planning has been announced. The center will be known as the Mid-South Regional Medical Center and will cover an area of Middle and East Tennessee and Southern Kentucky.

Congress enacted legislation enabling the health centers in 1965 and between 50 to 100 projects will be put into operation across the nation under the provisions of the act. Nashville is the tenth city in the nation to be selected for one of the centers.

#### **Meharry Medical College**

The National Institute of Health has awarded approximately \$1 million to Meharry Medical College to continue its program of research and treatment of heart disease. The project which began five years ago under a seven-year grant from NIH, is designed to provide a unified approach to clinical investigation of cardiovascular diseases by all departments and divisions of Meharry. The new grant will begin in 1968.



Dr. Daniel T. Rolfe, dean of the school of medicine at Meharry, has been selected as a member of the committee for public health training in the U. S. Department of Health, Education and Welfare. He will make recommendations to the surgeon general on public health training programs, including graduate training.



Dr. L. O. P. Perry, assistant professor of internal medicine, has been named medical director of the college-owned Hubbard Hospital. He succeeds Dr. Axel C. Hansen who resigned to develop the division of ophthalmology, which he now heads. Dr. Frank A. Perry, associate professor of surgery, has been named assistant medical director and director of medical education at the hospital.

#### **PERSONAL NEWS**

**Dr. Donald R. Lewis**, Jackson, is associated with Dr. Swan Burrus and Dr. Swan Burrus, Jr. in the practice of obstetrics and gynecology at the Woman's Clinic.

**Dr. B. F. Byrd, Jr.**, Nashville, was the featured speaker at the annual meeting of the Benton County Unit of the American Cancer Society, Tennessee Division, Inc. on August 15th.

**Drs. Bland W. Cannon, C. D. Hawkes, Roland Myers and H. K. Turley**, Memphis, have been named to the Board of Directors of the newly established Mid-South Medical Center Council.

**Dr. William M. Young** has opened his office in the Patrick Clinic, Fayetteville, for the practice of pediatrics.

**Drs. Alvin J. Ingram and A. Roy Tyrer, Jr.**, Memphis, discussed the Medicare program at a meeting of the Memphis Rotary Club on August 2nd.

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**Dr. Ralph S. Hamilton's** thesis entitled, "The Effect of Electrical Anesthesia on Intra-Ocular Pressure" has been accepted by the American Ophthalmological Society. Dr. Hamilton has been accepted as an associate member of the Society.

**Dr. Stephen Farr**, formerly of Clarksville, has opened his office for the practice of pediatrics in Cookeville.

**Dr. James L. Craig**, Chattanooga, has been certified as a specialist in Occupational Medicine by the American Board of Preventive Medicine, Incorporated.

**Dr. J. T. Francisco**, associate professor of pathology at the University of Tennessee College of Medicine and Shelby County Medical Examiner, was guest speaker at a recent meeting of the Memphis Kiwanis Club.

**Dr. Roger Vieth**, a graduate of the Duke University School of Medicine, has become associated with **Drs. McCravey, Boehm and Waters** in the practice of neurosurgery in Chattanooga.

**Dr. A. B. Lipscomb**, Nashville, discussed "Athletic Knee Injuries" at the 1966 Tennessee Secondary Schools Athletic Association's school for coaches, held at Tennessee Technical University in Cookeville, July 26-29.

**Dr. Peter M. Duvoisin**, a specialist in internal medicine and cardiovascular diseases, has joined the Diagnostic Center, Chattanooga. He will be associated with **Drs. William B. MacGuire, Jr., Maurice S. Rawlings and T. F. Mullady**.

**Dr. Bruce F. Grotts**, Chattanooga, has been promoted to associate medical director of Provident Life and Accident Insurance Company.

**Dr. Ronald Eith** has joined **Drs. James H. Spaulding and Robert B. Clark, III**, in the practice of pediatrics at 1001 Ashland Terrace, Chattanooga.

**Dr. Harry Lee Walton**, Chattanooga, is the new medical director of the Team Evaluation Center at Erlanger Hospital.

**Dr. Nilton A. Lima**, urologist, has joined the staff of The Doctor's Clinic and Nautilus Hospital in Waverly.

**Dr. R. H. Kampmeier**, Nashville, took part in a three day symposium on "What's New in Infectious Diseases—Prevention and Immunization," held at The Jefferson Medical College, Philadelphia, Sept. 28-30.

## BOOK REVIEW

**SURGERY OF THE BILIARY PASSAGES AND THE PANCREAS** By Walter Hess, Priva Dozent Dr. Med., Zurich; Dozent of Surgery, Faculty of Medicine, University of Basle, Switzerland; Formerly Professor of Surgery, Medical School, University of Alexandria, Egypt. Translated from German into English by Heinrich Lamm, M.D., 1st ed., copyright 1965, 638 pages, illustrated. D. VanNostrand Co., Inc. Princeton, New Jersey. Price \$25.

This book represents a superb study in biliopancreatic surgery, based on 1,654 patients observed by the author as Professor of Surgery at the University of Alexandria, Egypt and as Priva Dozent in the Department of Surgery at the University of Basel, Switzerland. The translation has been effected in such a skillful manner as to leave a clear concise text that is comfortable to read.

In essence, there are three major portions to this book. There are: (1) anatomy, physiology, pathology, pathophysiology, diagnosis and course of disease; (2) diagnostic techniques including intra-operative diagnostic procedures, especially radiomanometry; (3) operations of choice and operative technique including pre and post operative care.

Particularly strong are the sections on pathology, diagnosis, the course of disease, operative techniques and postoperative course. Considerable detail has been given to the concept of radiomanometry which Dr. Hess considers an indispensable diagnostic adjunct.

This book would be an asset to the library of any physician interested in biliopancreatic disease as this is probably one of the most valuable books in print on this subject.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966-67

#### State

- |                   |   |
|-------------------|---|
| Nov. 9-11         | Tennessee Academy of General Practice, 18th Annual Scientific Assembly and Congress of Delegates, Gatlinburg Auditorium, Gatlinburg |
| April 13-15, 1967 | Tennessee Medical Association Annual Meeting, Sheraton Peabody Hotel, Memphis   |

#### Regional

- |                  |  |
|------------------|--|
| Nov. 14-17       | Southern Medical Association, Washington-Hilton, Washington, D. C.       |
| Dec. 5-7         | Southern Surgical Association, The Homestead, Hot Springs, Va.           |
| Jan. 20-21, 1967 | American College of Surgeons, Arizona Chapter, Arizona Inn, Tucson       |
| Feb. 15-19       | Atlanta Graduate Medical Assembly, Atlanta Marriott Motor Hotel, Atlanta |
| Feb. 13-16       | Medical Society of the State of New York, Americana Hotel, New York City |
| Feb. 23-25       | Central Surgical Association, Pittsburgh-Hilton Hotel, Pittsburgh, Pa.   |

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March 6-9	New Orleans Graduate Medical Assembly, Roosevelt Hotel, New Orleans
March 16-18	Southern Society of Anesthesiologists, Fort Sumter Hotel, Charleston, S. C.
March 20-23	Southeastern Surgical Congress, Americana Hotel, Bal Harbour, Florida
<b>National</b>	
Nov. 2-3	American College of Preventive Medicine, San Francisco Hilton, San Francisco
Nov. 3-5	Southeastern Chapter, Society of Nuclear Medicine, Durham, North Carolina
Nov. 26-27	American College of Chest Physicians, Flamingo Hotel, Las Vegas, Nev.
Nov. 27-30	American Medical Association Clinical Meeting, Las Vegas, Nevada
Dec. 2-7	American Academy of Dermatology, Palmer House, Chicago
Jan. 13-14, 1967	American Society for Surgery of the Hand, Jack Tar Hotel, San Francisco
Jan. 14-19	American Academy of Orthopaedic Surgeons, Civic Auditorium, San Francisco
Jan. 23-25	Society of Thoracic Surgeons, Meuhlbach Hotel, Kansas City, Mo.
Feb. 15-19	American College of Cardiology, Washington Hilton Hotel, Washington, D. C.
Feb. 18-22	American Academy of Allergy, Holiday Inn-Riviera, Palm Springs, Calif.
Feb. 26-March 4	American Society of Clinical Pathologists, Dunes Hotel, Las Vegas
March 12-15	International Academy of Pathology, Sheraton Park Hotel, Washington, D. C.
March 19-24	American College of Allergists, The Roosevelt, New Orleans

### Las Vegas Host to AMA Clinical Convention

A scientific program especially designed for the physician in practice is scheduled for the 20th Clinical Convention of the American Medical Association. The four-day meeting, November 27-30 will include scientific sessions on 18 major topics, three postgraduate courses, breakfast roundtable conferences, closed-circuit television and medical motion picture programs, and a variety of scientific exhibits.

Of special interest are the postgraduate courses, which have been expanded to three topics: Obstetrics and Gynecology, Fluid and Electrolyte Bal-

ance, and Cardiovascular Disease. Each course will consist of three half-day sessions, each of which will feature several outstanding teachers. There will be a \$10 registration fee for each course.

Topics for breakfast roundtable conferences: "An Agonizing Reappraisal of Cancer Chemotherapy," "The Problem and Potential of LSD," "The Management of Metabolic Bone Disease," and "Indication for Cardioversion."

Topics at the scientific sessions include: scintillation scanning, radiation and cancer, clinical pulmonary physiology, gastroenterology, futuristic diagnostic and therapeutic tools, neck pain, antibiotics, urology, aerospace medicine, unconsciousness, dermatology, juvenile diabetes, endocrine and metabolic diseases, pediatrics, surgery hematology, psychiatry, and otolaryngology. Scientific and industrial exhibits and all scientific meetings will be in the newly expanded Las Vegas Convention Center. The AMA House of Delegates will meet in the Dunes Hotel and Caesar's Palace.

For advance registration at the Clinical Convention, write to the Circulation and Records Department, American Medical Association, 535 N. Dearborn Street, Chicago, Illinois 60610. For information on hotel reservations, write to the AMA Housing Bureau, Las Vegas Convention Bureau, Convention Center, Paradise Road, Las Vegas, Nevada.

### American Academy of Pediatrics Postgraduate Courses

The American Academy of Pediatrics has scheduled five postgraduate courses for 1966-67. Subjects to be covered include allergy and immunology, learning development, progress in understanding the newborn infant, difficult problems in clinical pediatrics—diagnosis and management, and genetics in metabolism.

The first course in 1966 was held September 8-10 at the University of Michigan Medical Center, Ann Arbor. The second course will be held November 17-19 at State University of New York, Upstate Medical Center, Syracuse. The 1967 programs will be presented Feb. 23-25, Boston Lying-in-Hospital, Boston; March 9-11, University of Tennessee College of Medicine, Memphis; and March 30-April 1, Stanford University School of Medicine, Palo Alto, California.

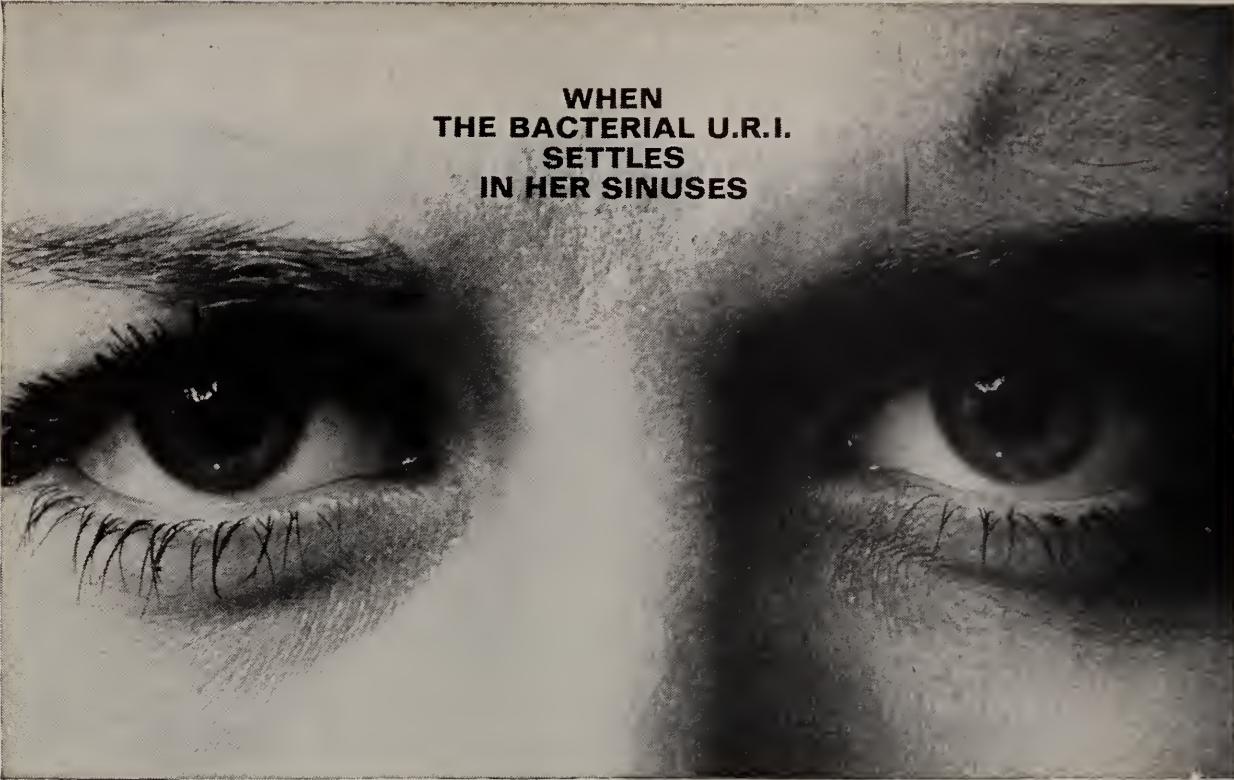
Information concerning registration, housing, and other matters may be obtained by writing Robert G. Frazier, M.D., secretary, American Academy of Pediatrics, P. O. Box 1034, Evanston, Ill. 60204.

### 1966 Postgraduate Course on Pulmonary Function to Be Held in New Orleans

The Third Annual Postgraduate Course on Pulmonary Function in Health and Disease will be held in the auditorium of the Tulane University School of Medicine, New Orleans, November 28-

(Continued on page 1054)

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# Development and Use of Home-Care Services

## Suggestions for Physicians

The changing age-composition of the US population and the proportionate increase in long-term illness and disability have resulted in increased recognition by the medical profession of the need to reexamine and improve traditional methods of delivering health-care services.

Over the past half century, the increase in prevalence of such chronic diseases as hypertensive and arteriosclerotic heart disease, cerebrovascular disease, arthritis, neurological disorders, malignancies, and pulmonary disorders has expanded demand for long-term medical and supportive care.

Many of these diseases after a dramatic, acute phase, are followed by long periods of convalescence, rehabilitation, and supportive care, often punctuated by additional acute episodes. Other medical problems have a less acute onset phase which requires definitive diagnosis followed by a long course of definitive therapy. Congenital defects (in structure or metabolism) and disabilities resulting from accidents also contribute their share of long-term-care problems.

These diseases or disabilities present difficult problems of medical, social, and economic significance. The long time involved in treatment, with resulting social and financial burdens on both the individual and society, necessitates that physicians become concerned with optimum methods by which needed services and facilities can be furnished to the patient.

For the acute phases, the complex, costly services of the general hospital are often necessary. In the period of continued disability, hospital stay on a continuous basis frequently is neither necessary nor desirable.

The patient may be moved from the hospital to a skilled nursing home when 24-hour surveillance by professional nursing personnel is still advisable. Where such surveillance is not essential, the patient may well benefit from the provision of medical and other needed services at home.

The provision of nursing care, social services, special diets, therapy, or other needed services to the patient at home constitutes a logical extension of the

physician's therapeutic arm. The personnel who provide these home-care services at the physician's request operate as a team.

Despite increased recognition and attention given to the development of home-care services over the past 20 years, the availability of such services still falls considerably short of estimated need. In terms of home-nursing services, for example, according to recent US Public Health Service figures, agencies providing such services are not evenly distributed throughout the country. In 1963 only 18% of the counties (containing 55.6% of the population) reported that either total or partial coverage of nursing care of the sick at home was available to patients needing it. In that year, 47 of the 50 states reported some programs for nursing care of the sick at home. However, only two of these 47 states reported that such programs were available to all of their residents. Six other states reported that care was available only in the cities of 25,000 or more. Three states reported that no provision had been made for home-nursing care by any agency within those states.

The current availability of other types of home-care services, such as physical therapy and homemaker-home-health-aide services, also falls well short of the total estimated need.

Organized medicine has long endorsed the concept of home care. In December 1960, the AMA House of Delegates recommended that "physicians be urged to participate in organized home-care programs for any patient who can benefit from the program and to promote such programs in their communities." The present report has two purposes:

- To assist the medical profession in effectively using such services in the care of their patients
- To suggest ways in which the physician through his medical society can stimulate development of these services where they are needed.

Increased interest in chronic disease and long-term care is pointedly shown by the recent enactment of PL 89-97 (medicare) and PL 89-239 (heart disease, cancer, and stroke amendments). Medicine is faced with a challenge to set goals within the context of these enactments and to mold evolving programs, including home care, in such a way as to assure the continued high quality of medical care.

The planning and development of home-care services must be realistic in terms of the number of personnel available to staff such services—especially in

This report was prepared by the Staff Task Force on Home Health Services, representing the AMA departments of governmental medical services, health care services, hospitals and medical facilities, and nursing. (J.A.M.A. 197:129, 1966)

Reprint requests to AMA Department of Health Care Services or Department of Hospitals and Medical Facilities, 535 N Dearborn St, Chicago, Ill 60610.

view of the current and projected shortages in virtually all health disciplines. The mere existence of funds to finance services cannot guarantee sufficient personnel to provide these services. The development of new programs or means of providing services should not be undertaken hastily when this would mean loss of needed personnel from already established and equally needed facilities.

On the other hand, some areas may well have an untapped reservoir of currently inactive health personnel who would be willing to participate in new programs on either a full- or part-time basis. An example would be the registered nurse who left nursing to raise a family but is now willing and able, with perhaps some refresher training, to return to her profession. There is also the possibility of careful experimentation in use of less-highly-trained personnel in all areas of skill, working under the close supervision of the registered nurse, the professional therapist and others whose services may be involved in a home-care program. Given proper training, direction, and guidance, such auxiliary personnel could help the health professionals extend their services to more patients by performing some of the more routine and mechanical aspects of services. For example, the homemaker-home health aide might supplement the work of the visiting nurse by providing personal-care services to the patient. Nurses and nurse's aides could be given greater indoctrination in rehabilitative techniques, so that they might carry forward the work of the physical therapist.

### Patterns of Home Care

For this report "home care" means any arrangement for providing, under medical supervision, needed health care and supportive services to a sick or disabled person who is at home. In addition to nursing care, such services include dental care, drugs and medical supplies, homemaker-home-health-aide services, laboratory and x-ray services, meal service, nutritional guidance and diet therapy, occupational therapy, physical therapy, podiatry, prosthetic appliances, psychological services, school services, social services, speech therapy, and vocational services.

In some instances, patients might better be transported to and from a central location, eg, a rehabilitation center, outpatient department, or dental clinic, for some of the above services when a shortage of health personnel or difficulty in transporting specialized equipment so dictates. Arrangements should be made for immediate access to inpatient-care facilities when needed. Arrangements for the loan or rental of needed hospital supplies and equipment should also be made.

*Training of the patient in self-care, and instruction of family members will be of prime importance in achieving maximum effective utilization of available professional health personnel.* In fact, a little time devoted to careful instruction of, say, the diabetic or post-coronary patient and his family before the patient goes home might in many instances reduce or eliminate the need for home-care follow-up.

Home-care services are provided from a variety of sources. They may be provided through a *single service agency*, such as a visiting-nurse association which provides only nursing care to patients at home. They may be provided by a *multiple service agency*, which arranges for two or more types of home service, such as home nursing care, plus physical therapy and home-

maker services. Finally, they may be provided through what are termed "coordinated home-care programs," which coordinate a wide range of home services around the patient's individual needs, through (1) centralized responsibility for administration and (2) coordinate planning, evaluation, and follow-up procedures to provide physician-directed services. There are currently about 69 such programs in operation in the United States which meet the definition of a coordinate home-care program.

Whatever the mechanism through which they are provided, home-care services should be viewed not as a substitute for hospital, nursing home, or other institutional care, but as part of the logical extension of a total-medical-care plan. As such, home care can enable the patient to remain in, or return to, what can be a psychologically therapeutic home environment and may effect a cost-saving as well. The patient should want to receive care at home, and the home environment and family relationships should be conducive to care.

### Role of the Physician

Depending on the needs of the patient, home care may require the services of many persons and organizations combining efforts as a team, directed by a physician, to provide the best possible health care and supportive services for the patients. Leadership by physicians is essential to the efficient and successful provision of home-care services.

1. The physician should be aware of the home-care services available in his community, and the various methods by which his patients can pay for, or be assisted in paying for, such services.
2. He should establish a plan of treatment for each patient he refers for home care, and should review this plan periodically with home health personnel providing care.
3. The physician should ensure that he receives regular reports, observations, and progress notes from the health personnel providing services. Special effort may be needed to maintain this communication when a patient is cared for at home, because of the separation—in time and distance—between the different services and personnel involved.

### Role of the Local Medical Society

The local medical society is properly concerned with the availability and adequacy of health-care services which support the work of the physician. The medical society, therefore, should not only stimulate physician interest and acceptance of home care, but should provide community leadership—both in improving coordination of existing home-care services and stimulating the development of new services where they are needed.

Adequate community home-care services will be dependent not only on the actions of the local medical society, but on the cooperative planning efforts of many public and private health and service agencies in the community. The medical society, therefore,

\*For definition of a "coordinated home-care program," see  
 (a) *Proceedings; AMA House of Delegates* (June 24, 1962, p 119; or  
 (b) *Survey of Coordinated Home Care Programs*, PHS Publication No. 1062, July, 1963, p 3.

find its most valuable contribution to be that of stimulating the development of a community planning body.

Among the agencies which might well become involved in planning for home care, in addition to the medical society and its auxiliary, are local and state health departments (particularly their bureaus of nursing); local visiting nurse associations or community nursing services; local or state nurse, hospital, and nursing-home associations; local or state professional groups, such as those for dentists; physical, occupational, and speech therapists; dietitians; chambers of commerce; and selected community leaders. The medical society should attempt to ensure that such a planning body has broad representation from all organizations concerned with such care.

This planning body will want to consider the following steps in the development of adequate community home-care services:

- **Measure the need for such services in the community.**—The medical society, with the cooperation of medical staffs, might well structure a bed survey of hospitals and nursing homes in the community to estimate the number of patients who might be eligible for home-care services but must remain in the institution for lack of a more suitable alternative. Physicians in the community could provide information as to the number of their patients who might benefit from home-care services. Existing agencies serving the sick at home should be surveyed and consulted as to unmet needs.
- **Measure the capacity of the community to provide home care.**—Existing agencies should be surveyed as to the home-care services they currently provide and as to their capacity to enlarge the scope of such services, as well as develop additional ones.

The data thus gathered would enable the local medical society or another community agency to become a center of information on existing services, and to assist local physicians in securing home-care services needed for their patients. This information-gathering effort might well evolve into a medical-society- or community-sponsored referral center which maintains and compiles information on all types of health-care facilities and resources in the community. Such a central information and referral service could assist physicians, patients, and other groups seeking the proper resources for care. Medically sponsored referral services of this type have been, or are being, established in a number of areas; for example, by the Essex County Medical Society in East Orange, NJ, and the Denver Medical Society in Colorado.

After exploring the need for, and availability of, services, the planning body can set forth the scope of envisioned home-care programs and decide on the administrative agency.

- **Identify expected sources of income for the program.**—The planning body may find it practical to use short-term subsidies in the formation of a program. However, it is not realistic to structure services for which there is little likelihood of ongoing financial support. Information—and commitments when appropriate—should be obtained from voluntary health insurance and prepayment plans, public assistance agencies, workers' compensation agencies, rehabilitation agencies, and other third-party payers prior to the organization of a home-care program as to what services will be underwritten, in what quantity, at what cost, for whom, and for how long. Such information would in-

clude that pertaining to services available to persons over age 65 who are covered under PL 89-97 (the medicare law).

The soundly based home-care program will operate without restrictions as to age or economic status of patients served. The growing need for home-care services extends across all segments of the population; involving those who can afford to pay as well as those who cannot, and those in younger age groups as well as those over 65.

- **Establish an advisory committee for the program.**—A committee composed of medical, nursing, and other appropriate health personnel should be established to provide guidance and interpretation, and to evaluate the program on an ongoing basis.

- **Prepare promotional and educational material.**—The medical society should ensure that the educational and promotional materials prepared by the home-care program are medically sound and ethically presented.

### Home Health Services Under PL 89-97

Benefits will be available for persons over 65 through parts A and B of Title XVIII of PL 89-97—the "medicare" act—for up to 100 "home health visits"† under each part of this law, if the agency providing home-care services meets the definition of a "home health agency" as established by the law and its implementing regulations.

Qualifications for participation as a home health agency include arrangements for providing (1) skilled nursing services by or under supervision of a registered professional nurse and (2) at least one of the following additional services, which are covered under the law: physical therapy, occupational therapy, speech therapy, medical social services, or home-health-aid services.

The provision of medical supplies (other than drugs and biologicals) and medical appliances is also covered under the law. The home health agency may have a written agreement with a certified hospital or extended-care facility or a rehabilitation center to provide on an outpatient basis any of the covered home health services when the furnishing of such involves the use of equipment which cannot be made readily available to the patient in his place of residence. Transportation of the patient to these facilities, however, will not be paid for under the law. Other services not covered under the law include those for which the recipient has no legal obligation to pay, such as services provided without charge by the home health agency to anyone in the community; personal comfort items; food-service arrangements (eg, meals-on-wheels programs); housekeeper's services; and charges imposed by relatives or members of the patient's immediate household.

Other conditions for participation as a "home health agency" are as follows:

- (1) The agency must have policies established with the approval of a group of professional personnel which includes a licensed physician and a registered professional nurse, and must provide services under supervision of

<sup>†</sup>For a definition of "home health visits," see *Health Insurance for the Aged: Conditions of Participation for Home Health Agencies*, US Department of Health Education and Welfare, Social Security Administration, HHS-2, March, 1966, p 20.

- a physician or a registered professional nurse
- (2) The agency must maintain clinical records on all patients
  - (3) If the state or locality licenses agencies of its type, the home health agency must be licensed or meet the requirements for such licensure. (A profit-making agency, such as a proprietary nursing home, *must* be licensed as a home health agency by the state to be eligible for participation—that is, no proprietary agencies can participate in a state which has no licensure law for home health agencies.)

Complete information on conditions for participation as a home health agency should be sought early in the planning of a home-care service from the state agency administering these parts of PL 89-97.

As indicated, home health services can be provided by a number of different types of agencies. Examples of agencies which currently provide or arrange for home-nursing services—with or without additional home-care services—include visiting nurse associations, subdivisions of a local or state health department, combination visiting nurse association—health department agencies, departments of hospitals or medical schools, medical clinics, or rehabilitation facilities, categorical voluntary health agencies, subdivisions of a local or state welfare department and extended-care facilities offering extramural home health services.

In 1963, according to US Public Health Service figures, 1,262 agencies provided nursing care to the sick at home. About 240 of these agencies provided at least one additional therapeutic service in addition to nursing care. Included in these 240 agencies were 69 "coordinated home-care programs."

Through information-gathering activities state and

local medical societies can help identify areas where new programs are needed, or where existing agencies need help in meeting standards for participation under the law. By the same token, medical societies can help guard against unnecessary duplication or multiplication of home health services, and promote coordination of services between existing agencies.

Because of the requirement that home health agencies establish care policies with the approval of a professional advisory group that must include a physician, a medical society should be prepared to act on requests that it provide physician participation in such advisory groups. This could be done by appointing a special committee which would provide—as a group or through individual members—medical representation in the advisory group of each home health agency requesting it.

When the home health agency is hospital-based, medical representatives to the professional advisory group for the hospital-sponsored program should be appointed by the hospital medical staff. To improve overall liaison and planning, the medical society should attempt to include in its special committee a physician from the professional advisory group in each hospital-based home health agency.

The medical society, through its special committee, can also assist with and participate in training programs to improve the skills of personnel working in home health agencies. This can be done through consultation on development of overall curricula for training programs, and through arranging for physicians to serve as faculty members in such programs.

Finally, the medical society special committee, or subcommittee thereof, might well assume responsibility for reviewing utilization of the services provided by home health agencies in the community, so as to ensure optimum patient care.

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## Instructions to Contributors

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Manuscripts must be typewritten on one side of letter-weight paper. Either double or triple spacing and wide margins must be provided to facilitate editing which will be legible for the printer.

Bibliographic references should not exceed ten or twelve in number documenting key publications. They should appear at the end of the paper. The bibliographic references must conform to the style used in the American Medical Association publications, as,—Alais, F. G.: What Is Known About It, J. Tennessee M. A., 35:132, 1950.

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# Journal of the Tennessee Medical Association

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It is quite generally accepted that about one of every ten of our country's citizens will be admitted to a hospital because of mental disease at sometime during his life. Does our profession face any greater problem in preventive or medical care? The doctor, even more than the average citizen, has been blind to this fact as long as he thought of a mental hospital as one for custodial care only. The "open" philosophy for the mental hospital awakens everyone to the fact that mental health and disease are part and parcel of the whole area of health and disease.

## The Open Hospital

ANDREW S. WACHTEL, M.D., Oak Ridge, Tenn.

During the last 15 years there has been a growing trend toward "open" mental hospitals. This trend was first seen in England in the early 1950's and was primarily set in motion through the efforts of Drs. McMillan and Rees of England and Dr. George Bell of Scotland. American psychiatrists first gave the philosophy of open hospitals serious thought after a visit to England in January 1951 to study the mental-health program there. After this visit, several departments of mental health, notably those of New York, New Jersey, and Connecticut declared the open hospital to be the policy of their states.<sup>1</sup>

Although the policy of open hospitals is purported to be a recent advance in the field of mental health as well as being an English concept, it should be noted that this philosophy of treatment had some very early beginnings in our country. In 1842, Charles Dickens wrote, "*The state hospital for the insane is admirably conducted on those enlightened principles of conciliation and kindness which 20 years ago would have been worse than heretical . . . Every patient in this asylum sits down to dinner every day with a knife and fork . . . At every meal, moral influence alone restrains the more violent among them, and is found even as a means of restraint, to say nothing of it as a means of cure, a hundred times more efficacious than all the straight waist-coats, fetters, and hand cuffs that ignorance, prejudice and cruelty have manufactured since the creation of the world. In the labor department, every patient is as freely trusted with the tools of his trade as*

*if he were a sane man. It is obvious that one great feature of this system is the inculcation and encouragement, even among such unhappy persons, of a decent self-respect.*"<sup>2</sup> Thus, Mr. Dickens described the Boston State Hospital over 100 years ago.

Somewhat later, in 1905, the first totally open hospital reported in the international literature was opened in Peoria, Illinois. This hospital based its position on a refusal to "adapt an entire institution to the demands of its smallest and worst class."<sup>3</sup> The accomplishments at that time included:—(1) a completely open hospital with the removal of gratings and bars, (2) non-restraint, (3) the eight-hour work day, (4) women attendants on wards for men, (5) the universal employment of patients, and (6) the segregation of patients with tuberculosis.<sup>4</sup> Since these early beginnings several open hospitals have developed during the 1930's and 1940's. Some of these are:—Boston's Adams House; the Austin Riggs Hospital in Stockbridge, Massachusetts; the Galveston Psychopathic Hospital, Galveston, Texas; and Montreal's Allen Memorial Hospital. More recently the Massachusetts Mental Health Center opened its doors in 1956, and in 1960 the St. Lawrence State Hospital in New York became the first large public hospital in this country to become 100 per cent open. In any mention of open hospitals, it would certainly be most inappropriate in Tennessee to fail to mention our neighboring hospital at Moccasin Bend, which has successfully operated as an open hospital since its beginning in 1961. As of this writing, many of the state hos-

pitals throughout the country maintain a majority of open wards, with the retention of closed wards for specific patients whose difficulties in self-control and destructive behavior require a confined environment. This seems to indicate that the open hospital has become accepted policy in our country.

In discussing the open hospital and its operation, it is necessary to define the basic philosophy. Primary aspects to consider are:

- (1.) The preservation of human dignity of all patients as well as that of the staff.
- (2.) Individual responsibility.
- (3.) Human beings, sick or well, respond to the expectations of the environment, generally speaking.
- (4.) The mentally ill patient is more like the rest of us in his humanity than unlike us as a result of his illness.
- (5.) The function of the hospital is primarily therapeutic, not protective or punitive.<sup>1,5</sup>

In operation, this philosophy of treatment can be, and has been, applied in various ways, from totally open institutions, where all patients are free to come and go as they choose to a wide range of modifications of this freedom. How this philosophy is put to practice in any given hospital is dependent on the community's attitude, the attitude and enthusiasm of its staff, the size of the hospital, the structure of the hospital and its buildings, and its location in relation to the community.

Certainly, the "open orientation" in any applied way is by no means general today. Dr. Moody Bettis in a recent report to the citizens of Texas said: "Unhappily, what we know does not coincide with what we do. Our systems of patient care, our laws and our facilities evolved in an era when the mental patient was possessed of demons, when protecting the public—not treating the patient—was the prevailing concern. In recent decades bold men have struggled to change treatment programs, to crowd humanistic influence into protective-geared systems. Their best has been laudable, but insufficient to overcome built-in antitherapeutic handicaps. Despite our

beliefs, the public still regards mental illness as an informal offense against society."<sup>6</sup> One might add to Dr. Bettis' comments that not only does the public so regard mental illness, but to some extent so does the professional community.

While the philosophy of the open hospital is viewed as a positive approach to the treatment of patients, to be objective one should reflect on the possible handicaps of such a philosophy.

(1.) Economically the custodial institution can be efficiently managed for much less money than the therapeutic institution, since an adequate custodial institution can be run with less than one-third the personnel required for a treatment facility.

(2.) Certain patients do require protection, and the community does require protection from a small number of patients. One might note, however, that there seems to be considerable misinformation about the issue of the community's protection. In a series of 10,247 patients from the New York State mental hospitals, a careful study was made of the probability of arrest. I would like to quote from that study because I think it is pertinent to this area of "how dangerous are the mentally ill?" "The conclusion drawn from this survey is that attack of mental illness with hospitalization does not tend to leave an inclination toward criminal activity greater than that which existed prior to the illness, and that it does not produce such a tendency if it did not previously exist. Crime rates are not higher among the ex-mental patients than among corresponding persons in the general population; indications are that the *reverse* is true."<sup>7</sup>

But, as in all communities, certain members of the community are a hazard and the community certainly is entitled to appropriate care for these individuals. As Dr. Walter Barton,<sup>8</sup> the Past-president of the American Psychiatric Association has said, "The open door is not an abdication of staff responsibility toward people who cannot manage themselves, but a symbol of a treatment philosophy that embodies respect for the individual, trust and the development of self-confidence and self-management." This emphasizes that open units do not im-

ply less responsibility on the part of the staff, but more since they are trying to reach an objective with each patient, rather than just seeing that he is fed and accounted for each day.

Even if the protective function of the hospital is impaired by an open-hospital philosophy, (and certainly most of us in psychiatry think there is such a function, although we do not feel it is the primary function) are there in fact any advantages to patient-care in such a philosophy? We believe there are.

(1.) While the cost per day is higher, the cost per illness for the patients, and therefore for the state, is much less.

(2.) The stigma of mental disease is diminished by the removal of locks and barred windows. The continual emphasis on security is no longer the image of the hospital.

(3.) The hospital becomes a health-care facility rather than a protective custodial institution. As a result, the open hospital encourages early treatment, for certainly any of us would be more willing to seek and to accept help if force and compulsion are not principal instruments of management. With improvements in the acceptance of treatment by the patient, it is possible to maintain improvement and to build upon it in the more normal social interchange of the open unit. In addition, mutual respect, both by the patient for staff and vice versa, is enhanced.

(4.) As has been noted, all of us tend to respond to the expectations of our environment. Expectations which are expressed verbally, and in our surroundings (architecture, furniture, draperies, etc.), in fact, in everything and with everyone one may come into contact with during his day. These positive expectations tend to produce a decrease in destructiveness, aggressiveness and disturbed behavior on the part of the patient. Along the same line of thought, they tend to provide more tolerance on the part of the staff, as well as a greater desire to help and understand the patients with whom they are working. The reverse is true of negative expectations which are conveyed from a negative envi-

ronment. It is an old maxim that if you continually make one feel you expect bad behavior, eventually you will get it.

(5.) One side benefit of open doors, sometimes quite significant where nursing staff is critically short, is that there is a great saving of time in the turning of keys to lock and unlock doors for necessary errands of patient and staff.

There is another area of the open philosophy, which I wish to emphasize since I believe it is the more basic and the most important. More important than the absence of locks or bars, is the presence of an open attitude reflected throughout the whole community as well as in the hospital. This open attitude should allow for a willingness to change, a receptiveness to suggestion from the community and occasionally to the community, an active involvement by hospital patients and staff in community concerns, and an active involvement of the larger community in the concerns of its hospital, since whether it is conscious of it or not, in a most unique sense this is its hospital. Not only do the citizens pay for it, they live with it, and, at present (in Knox County) about 700 of its residents are treated there each year.

One of the expectations of the open philosophy, as it applies to a mental hospital, has been perhaps better expressed by Dr. Hutchins<sup>9</sup> as he sees the need in the academic community. This is based on the inherent need for a "dialogue" between the institution and the community, as well as a dialogue within the institution between students and faculty; or, as we might put it, between the patients and staff and members of the community. Dr. Hutchins has emphasized that this is, and should be, a dialogue with free communication in both directions.

Likewise, within the hospital more open attitudes between staff and patients, and patients and staff are essential for an open hospital to be effective. We would then see the open hospital as a faith in human beings which would bring a willingness to accept and give within the hospital and within the community.

In reflecting the pros and cons of the open hospital, it must be kept in mind that

there is no single method of dealing with all patients. Illnesses vary and people vary—both one to another, and for each one from time to time, so that the responsibility of the hospital is to provide the environment which is conducive to improvement and a treatment regimen which will help the patient get well. These are dependent on the needs of the patient at the particular time in his illness, and not upon any single way of doing things.

As physicians, our concern must be primarily with treatment. This does not preclude the awareness of the need of protection for the patient, and the protection of the community. But our job is to help people get well.

Ultimately, in every instance it is up to the community whether the psychiatric facility is to be protective custodial, penal, or therapeutic. It would be folly to assume that any hospital director could produce an institution that is not what the people desire. Every citizen must decide what he would wish for his fellowman and what

philosophy he desires his hospital to express.

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\* \* \*

## Tennessee Medical Association

### 132nd Annual Meeting

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The authors show by their studies that in the infected male, at least, this combination of drugs offers some protection against reinfection as well as being therapeutically more effective.

# Usefulness of Long-Acting Penicillin In Combination With Short-Acting Preparations For Treatment of Gonorrhea\*

EUGENE FOWINKLE, M.D., NOBEL GUTHRIE, M.D., THEODA GRIFFITH, B.S., and JERALD DUNCAN, B.A., Memphis, Tenn.

Syphilis, it is contended, could be eradicated by 1972 if 30% of all syphilitics were treated before they could transmit the disease to others.<sup>1</sup> Since patients with gonorrhea are liable also to harbor incubating syphilis, it is highly probable that long-acting and short-acting penicillin in combination, administered to men having gonorrhea and to their sexual contacts in treponemical dosage, may make an important contribution to the control of syphilis as well as of gonorrhea.<sup>2-4</sup> This alone is probably sufficient to justify the routine use of such a mixture for both diseases, provided it can be proved as effective for treatment of gonorrhea as is short-acting penicillin alone. Furthermore, it seems logical that gonorrhea would be more successfully controlled if patients were not only cured of infection but kept free from reinfection as long as possible.

Hookings<sup>5,6</sup> and others have demonstrated that the "antibiotic quarantine" recommended by Schamberg<sup>7,8</sup> for such purpose reduces the repeater load in venereal disease clinics. Garson and Barton<sup>9</sup> have pointed out that "although 48 hours of exposure" (to penicillin) "will kill all gonococci in vitro, we do not know when such exposure is liable to occur in vivo, particularly in the female." He adds that, "if it is true that . . . certain tissue cells of the genitourinary tract are capable of taking viable gonococci within them and protecting such organisms from the effects of penicillin," and that these viable organisms "are available for the autoinfection of the host" after dissolution of the host cell, "the presence of long-acting penicillin in such a pa-

tient would be a deterrent to autoinfection."

Although in recent years the usefulness of long-acting penicillin in preventing relapse of gonorrhea or reinfection has been considered settled, the authors believe the subject is in need of further consideration. Even though we are tempted by many dazzling new agents that promise glamorous results, we believe that since penicillin is the treatment of choice for syphilis, it should not be abandoned, without great caution and careful consideration, as the preferred initial treatment for gonorrhea as well.

We therefore initiated this study, (a) to compare the effectiveness of two different penicillin preparations to free male and female gonorrhreal patients of infection at the end of one week, as determined by the fluorescent antibody technic; and (b) to compare the effectiveness of these preparations in keeping the patients free from gonorrhreal infection for 5 weeks in the natural environment, with the usual opportunities for reinfection. No attempt was made to distinguish resistant infection, relapse or reinfection.

## Method of Study

In 1964, during a 10 month period, 1,211 consecutive male patients suffering from acute urethritis and 1,034 consecutive female gonorrhreal contacts were seen at the venereal disease clinic. The patients with no history of sensitivity to penicillin were placed randomly into two groups (A and B, Table 1), to receive treatment as follows:

### Group A:

Potassium penicillin G	600,000 units
Procaine penicillin G	600,000 units
Benzathine penicillin G	1.2 million units

Total

2.4 million units I.M.

\*From the Communicable Disease Control, Memphis and Shelby County Health Department, Memphis, Tenn.

## Group B:

Potassium penicillin G	1.2 million units
Procaine penicillin G	1.2 million units
Total	2.4 million units I.M.

At the initial visit, specimens were obtained for examination by the fluorescent antibody technic, and the patient was examined, treated with the designated preparation, and instructed to return in one week. If the patient did not return in exactly one week, an investigator or a medical student research assistant was sent on the following day to bring him or her into the clinic.

At the first return visit, specimens again were obtained for examination by the fluorescent antibody technic, and the patient was evaluated clinically and instructed to return in exactly 4 weeks (5 weeks after the initial visit). If the patient did not make the second return visit on the day scheduled, an attempt was made to reach him or her by telephone. An investigator or research assistant was sent to bring the patient into the clinic if telephoning was unsuccessful for two days. However, despite such efforts, some patients were lost to observation.

At the second return visit specimens again were obtained for fluorescent antibody examination, and clinical evaluation was carried out.

## Results

Admitted to the study were 1,206 male patients with urethritis. Of these, 606 were placed in group A and 600 in group B.

Of the 606 patients who were treated in group A, the initial test by culture and fluorescent antibody examination was positive for *Neisseria gonorrhoeae* for 540 patients. (Table 1.) Likewise, in group B the initial test was positive for 540. These two groups of patients with proved gonorrhreal urethritis were used to compare the results of the two treatment schedules.

Table 1  
INITIAL TESTS FOR 1206 MALE PATIENTS WITH URETHRITIS

	Examination for <i>N. gonorrhoeae</i>			Total
	Positive	Negative	Unknown	
Group A	540	66	—	606
Group B	540	58	2	600
Total	1,080	124	2	1,206

At the end of one week, 345 of the 540 male patients in group A who were laboratory-positive initially returned for the first re-examination. Fourteen (4%) were still positive. Of the 540 male patients in group B who were laboratory-positive initially, 352 were re-examined at the end of one week. The specimens from 33 (9%) still yielded positive reactions. The difference is highly significant (chi square,  $p = \text{less than } 0.05$ ).

The group totaling 650 patients whose laboratory tests had been positive on the initial visit and who were examined and found negative one week later were used to evaluate the effectiveness of the two treatment schedules for preventing reinfection during a subsequent period of 5 weeks. (Table 2.) Of the 331 patients in group A

Table 2  
RESULTS OF RE-EXAMINATION OF 1080 GONORRHEAL MALE PATIENTS ONE WEEK AFTER TREATMENT (RETURN VISIT I)

	Re-Examination for <i>N. gonorrhoeae</i>			
	Positive	Negative	Unknown	Total
Group A	14 (4%)	331	195	540
Group B	33 (9%)	319	188	540
Total	47	650	383	1,080

who had been laboratory-positive initially but negative at the end of one week, 220 were re-examined at the end of 5 weeks (return visit II). (Table 3.) For 9 of these (4%) the specimens were again positive. Of

Table 3  
EFFECTIVENESS OF TREATMENT SCHEDULES IN PREVENTING REINFECTION IN MALE PATIENTS WHO HAD BEEN LABORATORY-POSITIVE INITIALLY AND NEGATIVE AT THE FIRST RETURN VISIT (RETURN VISIT II)

	Re-Examination for <i>N. gonorrhoeae</i>			
	Positive	Negative	Unknown	Total
Group A	9 (4%)	211	111	331
Group B	58 (25%)	175	89	322
Total	67	386	200	653

the 319 male patients in group B who had been laboratory-positive initially and negative on examination at the end of one week, 233 were re-examined at the end of 5 weeks. The specimens from 58 (25%) were again positive. The difference is statistically significant (chi square,  $p = \text{less than } 0.001$ ).

The findings indicate that the male patients in group A who received both short-acting potassium and procaine penicillin G and long-acting benzathine penicillin G in

combination achieved superior therapeutic results at both 1 and 5 weeks after treatment.

Among the female patients in group A (Table 4) there were 293 who had positive

each interval. There is no way to compensate for such loss. The analyses described were based on the patients who actually were observed. Such analysis implies that the patients who disappeared from observation were similar to those who returned for examination. Such assumption cannot be proved but in this case it is reasonable to think that it is approximately correct.

#### Summary

Of the 1080 male patients suffering from bacteriologically proved gonorrhreal urethritis, 540 (group A) were treated intramuscularly with a combination of short-acting potassium penicillin G, 600,000 units and procaine penicillin G, 600,000 units with long-acting benzathine penicillin G, 1.2 million units. A second group of 540 (group B) received the short-acting mixture of potassium penicillin G and procaine penicillin G, each in doses of 1.2 million units. Only 4% of the 345 in group A who returned in one week for re-examination were still positive, whereas 9% of the 352 in group B who returned yielded positive results (chi square,  $p = \text{less than } 0.05$ ). Of the 650 patients in both groups who had been negative for *N. gonorrhoeae* at the first return visit, 453 returned and were re-evaluated 5 weeks later. Four per cent of group A and 25% of group B again had become positive (chi square,  $p = \text{less than } 0.001$ ). Thus the combination containing long-acting benzathine penicillin G provided superior therapeutic effectiveness and greater protection against reinfection than did the short-acting mixture.

Of the 597 gonorrhreal female contacts in both groups, 7% of the 237 treated in group A who returned in one week and 10% of the 253 returnees in group B were still positive (difference not statistically significant). At the second (5 week) post-treatment examination, 5% of the previously negative patients in group A who returned and 6% of the same category in group B again had become positive. Therefore the combination containing benzathine penicillin showed an effectiveness equal to that of the short-acting agents alone. For the gonorrhreal female, larger doses of the combination may be required than those used in this study.

Table 4

RESULTS OF FIRST POST-TREATMENT EXAMINATION  
OF 597 FEMALE PATIENTS LABORATORY-POSITIVE  
INITIALLY

	(RETURN VISIT I)				
	Re-Examination for <i>N. gonorrhoeae</i>	Positive	Negative	Unknown	Total
Group A	16 (7%)	221	56		293
Group B	25 (10%)	228	51		304
Total	41	449	107		597

laboratory results initially. Among the female patients in group B, 304 were positive at the initial examination. Of the 293 females in group A, 237 were re-examined in one week. The specimens from 16 (7%) were positive. Of the 304 female patients in group B, 253 were re-examined in one week. The specimens from 25 (10%) were positive. The difference is not statistically significant.

As had been done with the male patients, the female patients who had been positive initially but were negative one week after treatment were used to compare the two therapeutic methods in preventing reinfection over a 5 week period (Table 5). Of 221

Table 5

RESULTS OF SECOND POST-TREATMENT EXAMINATION  
OF GONORRHEAL FEMALE CONTACTS FIVE WEEKS  
AFTER FIRST RETURN VISIT

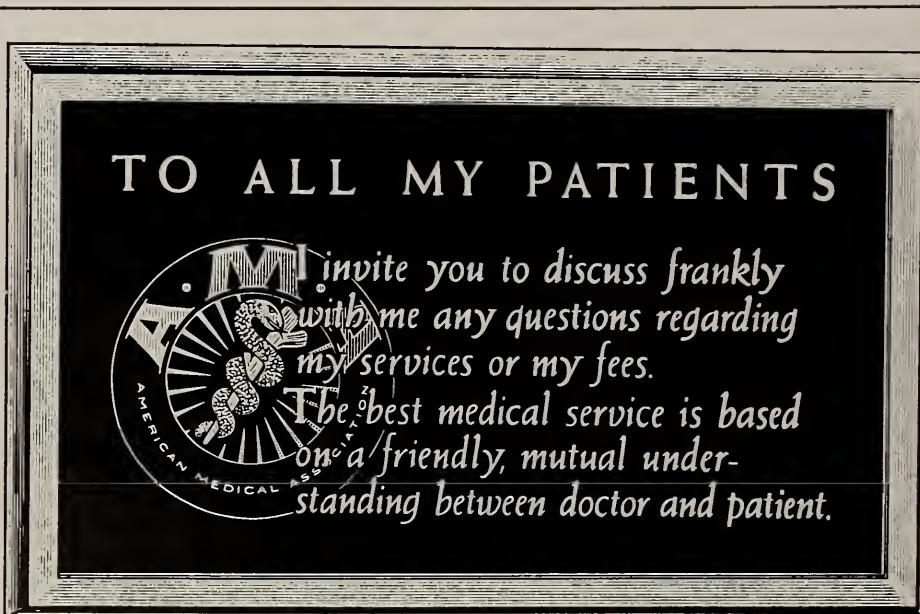
	(RETURN VISIT II)				
	Re-Examination for <i>N. gonorrhoeae</i>	Positive	Negative	Unknown	Total
Group A	9 (5%)	166	46		221
Group B	12 (6%)	176	40		228
Total	21	342	86		449

females who had been initially positive in group A and who were negative at the first post-treatment examination, 175 were re-examined in 5 weeks. Nine (5%) yielded positive specimens. Of 228 in group B who had been initially positive and who were negative at the first post-treatment visit, 188 were re-examined in 5 weeks. The specimens from 12 (6%) were positive. Although the results observed at the 5 week examination favored the treatment for group A the differences involved were not statistically significant.

It is unfortunate that such a large number of patients were lost to observation in

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The application of new methods of treatment for certain serious arrhythmias has altered greatly their outlook, for a time at least, in terms of either morbidity or mortality.

## Recent Advances In The Treatment Of Cardiac Arrhythmias\*

G. DANIEL COPELAND, M.D.,† Memphis, Tenn.

### Introduction

Among the physiologic wonders of the human body is the function of the myocardial pump and its electrical system. The sino-atrial node, which is an electrochemical generator, normally discharges a regular electrical impulse at a rate of 60 to 100 times each minute. This performance is dependable and is usually expected to continue for a traditional three score years and ten. It is remarkable that derangements of heart rate and rhythm do not occur more frequently.

The sino-atrial electrical impulse spreads through the atria, the atrioventricular node, the Bundle of His with its bundle branches, the Purkinje network and through the ventricular muscle. The classic properties of the myocardium, automaticity, conductivity, excitability, and contractility are associated with this electrical depolarization. Mechanical contraction of the ventricles produces ventricular ejection of blood and the cardiac output which is necessary for the perfusion of the organ systems. Cardiac output generally does not diminish significantly with sinus arrhythmia, sinus bradycardia, or sinus tachycardia by itself. The severe alterations in rate and regularity profoundly interfere with cardiac output and it is these arrhythmias which are the subject of this discussion.

While physical examination is helpful in the diagnosis of cardiac arrhythmias, the electrocardiogram is almost always necessary. In certain cases, even the standard electrocardiogram is not diagnostic because the P waves of atrial depolarization cannot always be separated from the QRS com-

plexes of ventricular depolarization. The esophageal lead is unique in that it can be positioned in the esophagus very near the left atrium; the P-waves are then greatly magnified. The Body electrode (a unipolar or bipolar saline bridge electrode) has been in routine use in our institution for the past several years. The electrode can be so placed as to reduce the size of the QRS complex while it magnifies the P wave; the salt bridge technique produces tracings with very steady baselines and thus facilitates the precise diagnosis of cardiac arrhythmias.<sup>1</sup>

When the heart rate becomes rapid with or without irregularity, the cardiac output falls:—there is specifically reduction in blood flow through the coronary arteries, through the cerebral arteries, through the mesenteric and renal arteries. There is considerable variation in the degree of reduction at a given rate in different individuals. For example, the elderly person with localized atherosclerosis of a cerebral artery may respond to an atrial tachycardia (rate 180 per minute) with cerebral ischemia and hemiplegia which is cured by conversion of the rhythm; in contradistinction, a young subject with healthy myocardium and arteries may only feel palpitations and weakness. A person with narrow coronary arteries due to atherosclerosis may have such a reduction in coronary blood flow with tachycardia that actual myocardial necrosis is produced. A patient with hypertension, with a valvular or congenital heart lesion, may have limited cardiac reserve and may respond to a persistent rapid heart rate with heart failure. Even if the heart rate is not tremendously rapid but is nonetheless irregular, the mechanical efficiency of the heart is reduced. It has been shown that when atrial fibrillation is present (atrial systole is absent and ventricular diastole varies) cardiac output may fall to a level as much as 20% below normal.<sup>2</sup> Clin-

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cally, this will be manifested by a reduction in exercise tolerance.

The symptoms of arrhythmias may include palpitation, anxiety, apprehension, sweating, faintness, dizziness, abdominal discomfort, ileus, convulsions, hemiparesis, hemiplegia, aphasia, visual disturbances, purplish discoloration of extremities and acute or chronic, left or right-sided congestive heart failure with the symptoms thereof (orthopnea, cough, etc.), and the angina pectoris of coronary insufficiency. Hypotension and death may follow if normal rhythm and rate are not restored.

#### General Treatment

If possible, hypoxia and hypercapnea should be corrected before or at the same time drug therapy is attempted in all cases and especially in those supraventricular arrhythmias associated with chronic lung disease and cor pulmonale. Acidosis and alkalosis should be treated and deficient electrolytes replaced; at times these measures alone will be rewarded by conversion of a serious arrhythmia to normal sinus rhythm. Paroxysmal atrial tachycardia with block due to digitalis excess and/or potassium deficit will frequently cease on administration of intravenous potassium chloride. Omission of improper medication may cure certain arrhythmias, e.g. nodal tachycardia caused by digitalis intoxication or paroxysmal ventricular fibrillation produced by quinidine (see below). The polarizing solution of Sodi-Pallares is now receiving wide clinical trial for the prevention of those arrhythmias associated with acute myocardial infarction. The solution is called "polarizing" because it is intended to restore polarity to the injured myocardial cell membrane. The solution consists of 40 units regular insulin, 40 mEq.L of potassium chloride in 1000 ml. 10% glucose in water. The patient with acute myocardial infarction receives about 1500 ml. per 24 hours of this solution via slow intravenous drip. Preliminary clinical reports tend to show marked reduction in the incidence of the cardiac arrhythmias incident to infarction but the literature still lacks reports of critically controlled series.<sup>3,4</sup>

#### Drug Therapy

The traditional drugs used in therapy of cardiac arrhythmias have included digitalis, quinidine, and procainamide (Pronestyl). Potassium salts, usually potassium chloride, have been introduced for the treatment of the arrhythmias produced by digitalis intoxication. While a complete discussion of these drugs is beyond the purpose of this paper, certain facets of their clinical application deserve emphasis.

Digitalis remains the drug of first choice for most supraventricular arrhythmias while for ventricular arrhythmias, quinidine or procainamide have generally proved more effective. Digitalis slows atrioventricular conduction and thus produces slowing of the ventricular rate. This is the predominant action in atrial fibrillation (with rapid ventricular response), in atrial flutter, and in atrial tachycardia without AV block. The vagal stimulating maneuvers, e.g. carotid sinus massage should always be tried first in atrial tachycardia without block. It must be emphasized that atrial tachycardia with block and also nodal tachycardia, are common manifestations of digitalis toxicity and when it is possible that this situation is present, digitalis is contraindicated.<sup>5</sup> Both supraventricular and ventricular premature contractions may disappear on digitalization when these arrhythmias are associated with heart failure.

While atrial flutter and fibrillation may be converted to normal sinus rhythm on digitalization, and while premature systoles may disappear on occasion after digitalization, it is more common that these events do not occur and more therapy is required. Quinidine and Pronestyl have similar pharmacologic actions, and both depress excitability, conduction velocity, and contractility of the myocardium. The direct effects upon the heart muscle are complicated to some extent by indirect effects resulting from anticholinergic action. (Digitalis has a cholinergic action upon the AV node in addition to its direct action on myocardium.) Large doses of quinidine may be required to convert the above mentioned supraventricular arrhythmias as well as ventricular tachycardia; the common side effects are well

known. Idiosyncrasy is also common and may occur with the first dose of the drug, hence the test dose is of great importance. Prior digitalization should be carried out on supraventricular tachycardias before conversion by quinidine is attempted to avoid so-called "paradoxical" tachycardia,—i.e. unless digitalis induced AV block is present, the ventricle may accelerate as the rate of flutter or fibrillation slows. Deserving of most emphasis is the fact that quinidine may cause ventricular fibrillation. This is probably more common than has been documented and is almost surely the physiologic event responsible for "quinidine syncope." This alone should deter the routine use of quinidine in all acute myocardial infarctions. Hypotension is a hazard when either quinidine or Pronestyl is administered intravenously and it is necessary to monitor blood pressure as well as the electrocardiogram when either of these drugs is so used. Some clinicians believe that the incidence of hypotension and ventricular fibrillation is so marked when quinidine is given intravenously that this route of therapy is omitted entirely. Quinidine is absolutely contraindicated in complete AV block since it may suppress the idioventricular pacemaker and produce asystole.<sup>5</sup>

Procainamide (Pronestyl) like quinidine, should not be administered when complete AV block is present. Pronestyl may also cause gastrointestinal disturbances, blood dyscrasias, ventricular asystole or fibrillation.<sup>5</sup> More recently chills, fever, and a lupus-like syndrome have been reportedly caused by this drug.<sup>6</sup> When either of these drugs is given intravenously, the QRS complex must be watched very carefully and if this perceptibly widens, the drug must be abruptly discontinued.

Potassium salts are not used as freely as they were in previous years in the intravenous therapy of digitalis induced arrhythmias, especially when such arrhythmias are accompanied by an atrioventricular conduction defect.<sup>7</sup> When, by clinical estimate there is a total body potassium deficit, intravenous potassium chloride (40 mEqL. in 500 to 1000 ml. dextrose in water) may dramatically convert digitalis induced arrhythmias. Potassium salts should not be

given, of course, when the patient shows uremia or oliguria.

Certain of the older drugs have recently been used with varying success in therapy of arrhythmias, and because arrhythmias are not infrequently refractory to therapy with traditional drugs, it is well to be familiar with less routine medications.

Diphenylhydantoin sodium (Dilantin) has long been a much-used anticonvulsant drug and as early as 1942 was noted to have effect on the electrocardiogram. Sporadic reports since then have increased in frequency and agree that Dilantin sometimes converts arrhythmias in dogs and men. (For the use of Dilantin intravenously dissolve 250 mg. in 5 ml. of solvent, and administer slowly by vein, with electrocardiographic monitoring, to a dose of 3.5 to 5 mg./kg. body weight. One should stop the drug if there is widening of the QRS complex!) Maintenance therapy consists of 200 to 400 mg. daily administered either orally or intramuscularly. Dilantin has proved especially effective in digitalis-induced arrhythmias (supraventricular and ventricular) as well as in spontaneous arrhythmias. It is not so effective in atrial flutter and fibrillation. Toxicity has consisted of transient bradycardia, hypotension, and transient AV block. The following arrhythmias have been converted by Dilantin:—ventricular premature beats, paroxysmal atrial tachycardia, atrial premature beats, nodal premature beats, and chronic atrial flutter. Animal studies indicate that diphenylhydantoin acts directly on the myocardium and does so in the absence of connection with the central nervous system. At the least, the drug has low toxicity and can be administered for arrhythmias produced by digitalis with a margin of safety that may on occasion be greater than electroconversion, quinidine, or potassium salts.<sup>8</sup>

Reserpine, which tends to produce sinus bradycardia in subjects with normal sinus rhythm, has been used to control the adrenergic manifestations of thyrotoxicosis (i.e. sinus tachycardia) and also to prevent the recurrence of paroxysmal atrial tachycardia. The bradycardia and hypotension are probably achieved in large part by central suppression of afferent sympathetic activity

which inhibits impulses to the cardioaccelerator and vasomotor fibers. Reserpine also acts directly on the myocardium and is considered to be concerned with depletion of myocardial stores of epinephrine and norepinephrin. In addition, reserpine may be used in the tachycardias with cor pulmonale (when digitalis is not so effective), as an adjuvant in atrial and ventricular tachycardia, and in mitral stenosis where the bradycardia is associated with a hemodynamically beneficial lengthening of diastole. The drug should not be used in acute cardiac emergencies and when the blood pressure is unstable. This drug is contraindicated in asthmatics and probably in any patient with a history of mental depression. Electroshock and insulin shock therapy are contraindicated after reserpine; these have resulted in apnea, cyanosis, arrhythmias and death. Toxic effects include nasal congestion, diarrhea, peptic ulcer, anorexia, nausea, dizziness, lassitude as well as a Parkinson-like syndrome. These usually occur on large doses and after prolonged treatment. The electrocardiogram may show ventricular premature systoles, prolonged AV conduction, and T wave changes after reserpine.<sup>2</sup>

Guanethidine (Ismelin) acts by inhibition of the release and/or distribution of transmitter substance from the terminals of the sympathetic nerve, probably by a reduction in norepinephrine stores. Because of its hypotensive effect, guanethidine is usually not employed to treat cardiac arrhythmias but has been successfully used to prevent recurrence of paroxysmal atrial tachycardia.<sup>2</sup>

Lidocaine (intravenously) has been used chiefly in the arrhythmias which occur during operation and in the catheterization laboratory. The mechanism of action is similar to that of procaine—ventricular excitability is depressed and with increasing doses, conduction time is slowed and refractory period is prolonged. Cardiac contractility is not diminished in therapeutic doses as may happen with quinidine. In contrast to Pronestyl and procaine, doses of lidocaine which produce comparable increases in diastolic stimulation threshold cause no fall in blood pressure or decreased

myocardial contractility. The drug stimulates the central nervous system and lowers threshold for ventricular fibrillation. In effective doses, lidocaine does not produce the electrocardiographic changes, hypotension, and diminished myocardial contractility which are noted with procaine, procainamide, and quinidine. A single intravenous dose is usually 1 mg./kg. and may be safely repeated at 20 minute intervals to a maximum of about 750 mg.<sup>9</sup>

*Case 1.* This 23 year old man had had a mitral commissurotomy on May 5, 1961. The mitral valve was calcified and, though the commissurotomy was successful, considerable mitral insufficiency was present after operation. Improvement was transient and the patient was readmitted on Dec. 30, 1963 for treatment of heart failure; he had been on digitalis since the operation. He was discharged on his 8th hospital day, improved, after therapy with diuretics and adjustment of his digitalis dosage.

On April 22, 1964, readmission was necessary because of heart failure which had proved refractory to out-patient management. Atrial fibrillation was present and after treatment of the failure by usual measures, electrical conversion was successfully carried out. The patient was discharged on his 30th hospital day on digitalis and quinidine.

The patient was again admitted on June 9, 1964 because of dyspnea, orthopnea, and marked limitation of activity. Physical examination revealed cyanosis at rest, pulmonary edema, cardiomegaly, hepatomegaly, edema, and ascites. Murmurs of mitral stenosis, mitral insufficiency, tricuspid insufficiency, and pulmonary insufficiency were present. Past history, family history, review of systems, and laboratory evaluation add nothing to this description.

It was considered that the patient was nearly moribund and cardiac surgery, using the heart-lung bypass, was recommended. A 20 lb. diuresis was obtained by vigorous treatment before operation. The operation had been scheduled twice, with all preparations having been made and the patient being taken to the operating room, but on both occasions it was postponed because of hypotension and rapid heart action.

Finally, on Aug. 5, the patient was successfully anesthetized and operated upon. The pericardium was found to be adherent to the epicardium and the heart's surface, after pericardial dissection, was injured and bleeding. The patient was on the by-pass for 84 minutes, during which time the diseased mitral valve was excised and a Starr-Edwards prosthetic mitral valve was installed. A tricuspid annuloplasty was then performed.

After the heart was closed, electrical conversion of the atrial fibrillation was done with the paddles applied directly to the atria (15 watt-sec-

onds direct current). The rhythm was converted from atrial fibrillation to an arrhythmia characterized by organized atrial activity but with shifting atrial pacemaker and intermittent AV nodal rhythm. (Top panel, Fig. 1.) This arrhythmia persisted for several hours but the thoracotomy was closed and the early post-operative course was otherwise uneventful. Digitalis and quinidine were given intramuscularly.

About 14 hours postoperative, the patient had a generalized tonic seizure and the monitor showed ventricular fibrillation which responded to direct current countershock, and assisted respiration. (Middle panel, Fig. 1.) Quinidine and digitalis were discontinued and Pronestyl was given intravenously. Ventricular fibrillation continued to recur and this individually was defibrillated electrically (DC) 11 times. Between episodes, the patient was alert, lucid, oriented, and took fluids orally. (It is understandable that he was afraid to go to sleep.) The EKG. showed sinus tachycardia between episodes of ventricular tachycardia. (Bottom panel, Fig. 1.) Potassium chloride intravenously did not prevent the recurrent paroxysms of ventricular fibrillation and it was only after the administration of lidocaine intravenously and the elapse of 36 hours that the last episode of ventricular fibrillation occurred. After this stormy interval, the patient's postoperative course was uneventful and he walked out of the hospital on the 78th hospital day to continue on digitalis and Pronestyl therapy. His last clinic visit was on May 4, 1966; normal sinus rhythm has been maintained.

**Comment.** Though frequently successful, we have discontinued the direct application of the paddle in the open-chest in electrical DC conversion of atrial fibrillation at the time of mitral surgery. This is now considered unnecessary since many of these patients convert to normal sinus rhythm spontaneously several weeks after operation. Furthermore, the atria must heal and there is a high relapse rate when the conversion is done at the time of operation. Finally, external synchronized DC countershock can be administered effectively weeks to months postoperatively with excellent results.

In this case, the chief problem was the prevention of the recurrent ventricular fibrillation. It is considered that the pericardial dissection with its necessary attendant myocardial damage contributed chiefly to this severe complication. This case also illustrates one of the most effective applications of lidocaine (Xylocaine) intravenously in the prevention of arrhythmias. (All defibrillation was done with direct cur-

rent.) This young man was moribund due to his advanced heart failure and is now able comparatively to enjoy life.

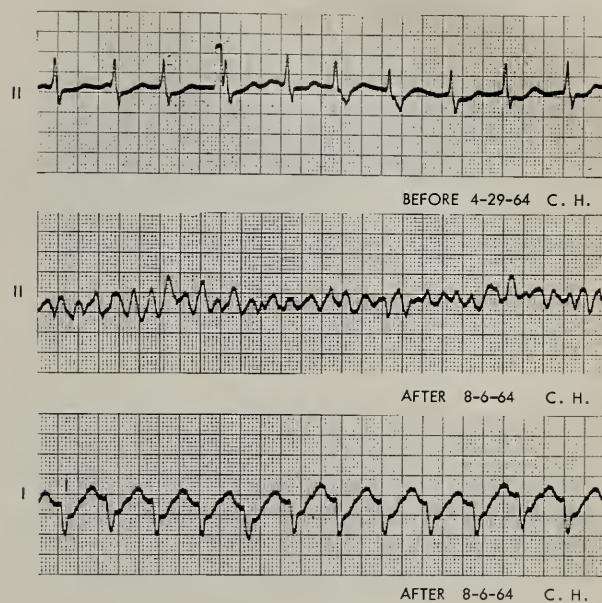


FIGURE 1

Mention must be made of neostigmine and methacholine (Mecholyl) which are used at times to treat atrial tachycardia. The side effects include nausea, abdominal pain (which subsides in about 30 min.), dysarthria, visual difficulties, bradycardia.

Pressor agents such as phenylephrine (Neosynephrine) have been used to terminate paroxysmal supraventricular tachycardia in normo-tensive subjects, especially when such tachycardia is a complication of heart catheterization. The mechanism is considered to be a reflex vagal effect. Administration of pressor drugs has also been associated with the onset of ventricular tachycardia. Mephentermine (Wyamine) has been used on ventricular fibrillation induced by epinephrine or cyclopropane anesthesia.<sup>2</sup>

Tranquilizing drugs are useful chiefly as sedatives. Hydroxyzine (Atarax, Vistaril) was strongly recommended for a time for cardiac arrhythmias but this use was considered ineffectual.

New drugs, which are not yet on the market, include the beta adrenergic blocking agents and ajmaline (Rauwolfa line). Ajmaline, another of the alkaloids of *Rauwolfia serpentina*, is similar to reserpine and will not be discussed further.<sup>10</sup>

The beta adrenergic blocking agent, Pro-

panolol, is now employed extensively in clinical trials for angina as well as for treatment of arrhythmias. This drug has been reported effective in nearly all the arrhythmias but is not invariably effective. Contraindications to its use now include bronchial asthma, acute, chronic or incipient congestive heart failure, pulmonary hypertension, and bradycardia. This drug shows considerable promise and further controlled studies are awaited.<sup>11</sup>

### Cardioversion

Despite the intelligent application of supportive measures and of drug therapy, the physician continues to encounter cardiac arrhythmias which defy his efforts and which terminate fatally. Though cardiac electric shock therapy (with alternating current) has been used for more than ten years by some, this method has not gained wide acceptance. One cause for worry was the possible production of ventricular fibrillation by applying electroshock to a heart by chance during the heart's so-called "vulnerable period" (near peak of the T wave, during repolarization). It remained for Dr. Lown<sup>12</sup> of Boston to introduce the synchronized direct current (DC) capacitor discharge for external electroconversion of cardiac arrhythmias.

Synchronization is achieved by the patient's own ventricular depolarization (electrocardiographic R wave) which causes the capacitor to discharge during the ventricular "safe" period some 20 to 30 milliseconds after "R." For success, it is necessary that the direct current countershock completely depolarize the myocardium and that a natural cardiac pacemaker (preferably the sino-atrial node) capture the myocardium with restoration of a normal mechanism.

This technique is now applied electively to atrial fibrillation for almost any refractory arrhythmia after drug therapy has failed, and is 100% effective when used for atrial flutter. Direct current countershock is effective (with direct application of the paddle electrodes and through the chest wall) in cases of ventricular fibrillation when alternating current countershock has failed. Naturally the DC discharge is not synchronized with ventricular fibrillation

since there is no R wave. In my opinion synchronized DC countershock is now the treatment of choice in atrial flutter which does not respond readily to digitalis and quinidine. Synchronized direct current countershock is also probably the treatment of choice in ventricular tachycardia and should certainly be applied without hesitation if there is hypotension, heart failure, or coronary insufficiency. It is important that digitalis intoxication should not be present, that the patient should be on a therapeutic dose of quinidine or Pronestyl, and that there should be no gross electrolyte or pH abnormality. Cardioversion is usually performed in an intensive care unit (oxygen and suction should be present) after minimal or no premedication under analgesia induced by a short-acting intravenous barbiturate such as thiopental (Pentothal). Anticoagulation is still employed at our institution in cases of chronic atrial fibrillation which are likely to be complicated by atrial thrombi. The incidence of systemic embolization on conversion of atrial fibrillation to normal sinus rhythm seems to be about the same (3 to 5%) with use of either countershock or quinidine. Routine anticoagulation in atrial fibrillation is not practiced at many other centers. The relapse rate continues to be high with atrial fibrillation though the conversion rate is more than 90 per cent. In the clinical situation marked by borderline or low cardiac output, even a transient period of normal sinus rhythm with increased cardiac output may prove sufficient to save a patient, and because of this fact a high relapse rate alone is no contraindication to cardioversion.

Our experience confirms that treatment of cardiac arrhythmias by synchronized capacitor discharge (cardioversion) is indicated in any refractory arrhythmia which incapacitates a patient and after mitral valve surgery. Contraindications include giant left atrium, calcified atrial wall, drug intoxication, and electrolyte imbalance. (Digitalis should be omitted 3 to 5 days prior to elective cardioversion of the well digitalized patient, to reduce myocardial irritability and diminish the likelihood that ventricular fibrillation might complicate the

procedure.) Cardioversion of atrial fibrillation which has recurred with adequate doses of quinidine, cardioversion of atrial fibrillation of one or more years duration, and cardioversion of atrial fibrillation with uncorrected mitral valve lesions will be followed by a high relapse rate. Primary myocardial disease responds poorly to cardioversion as well as to drug therapy. In our hands, more than 70 cardioversions have been completed without significant complication.

**Case 2.** This 58 year old man was admitted on Nov. 10, 1965. He had had myocardial infarctions both in August and November, of 1964. Treatment regimen had included warfarin sodium (Coumadin) and digitalis. He had done well until about 5:30 the evening prior to admission when he had the simultaneous onset of rapid heart action and substernal pain associated with pallor, cold perspiration, and prostration. He finally called his physician (at about 11:00 P.M.) and was promptly hospitalized. The EKG. revealed ventricular tachycardia. (Upper panel in Fig. 2.) Quinidine intramuscularly, then Pronestyl intravenously were administered without response. The patient became hypotensive and a pressor agent was required to maintain blood pressure. At this point, the patient was transferred by ambulance to our city with a registered nurse in attendance and with continuous administration of norepinephrine drip and oxygen. (Past history revealed only pulmonary emphysema. Family history and review of systems were negative.)

**Physical Examination:** The B.P. was 0; P. 0; T. 98.4; and R. 18. The patient was in profound shock with cold clammy skin, was cyanotic, but was oriented and cooperative. The heart rate, by auscultation, was 200 per minute; the examination was otherwise negative; and without detectable pulmonary edema.

The patient was transferred to the Intensive Care Unit and, under intravenous thiopental analgesia, the ventricular tachycardia was converted electrically (150 watt-seconds, external synchronized, direct current) to normal sinus rhythm. The blood pressure was obtained in two or three minutes but the norepinephrine drip was continued (gradually diminished) over the next 48 hours. Quinidine, digitalis, and Coumadin were continued and the patient had an uneventful hospital course until his discharge on the 30th hospital day.

It was considered that he probably had had another myocardial infarction. He continues to do well 8 months later.

**Comment.** This is an ideal application of synchronized external direct-current coun-

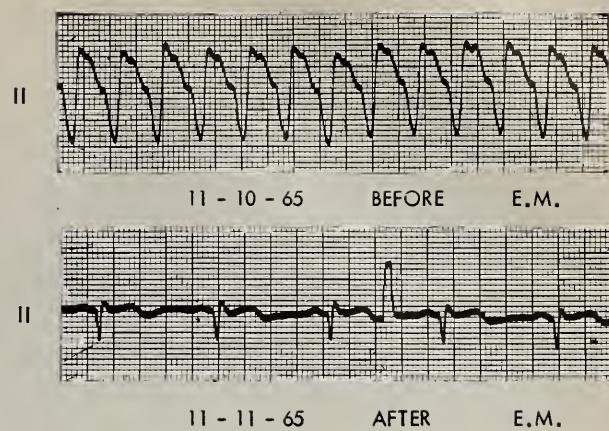


FIGURE 2

tershock in the treatment of a near-terminal ventricular tachycardia in shock after traditional therapy had failed. It was necessary to transfer the patient for some distance from another state; and, had the necessary equipment been available, the countershock could have been administered much more quickly than 21 hours after the onset of the arrhythmia. There was no question of drug intoxication (digitalis or quinidine) in this case; oxygen was in use; and there was no clinical reason to suspect electrolyte derangement other than that associated with the shock. While norepinephrine was necessary for 2 days after restoration of sinus rhythm, it is obvious that conversion to normal rhythm increased cardiac output as shown by a rise in blood pressure.

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#### **SELECTIVE REVASCULARIZATION OF THE MYOCARDIUM BY INTERNAL-MAMMARY-ARTERY IMPLANT. Gorlin, Richard; Taylor, Warren J. New Eng. J. Med., 275:283, 1966.**

Forty patients, 30 males and 10 females, at Peter Bent Brigham Hospital were selected for internal-mammary-pedicle implantation during the two year period from March, 1964 through February, 1966. In incapacitating angina pectoris or a history of a multiple myocardial infarction in the young person constituted clinical indication for internal-mammary-artery implantation. The operation was primarily performed for relief of incapacitating pain syndrome.

All candidates had selective cineangiography prior to operations. Only those with disease of the left coronary artery were ultimately selected for surgery. The ideal pattern for selection was based on the existence of greater than 50% stenosis (either single or multiple) of the left anterior descending, or of the left circumflex artery, or of both. Patients with isolated or predominant disease of the right coronary artery were rejected for this operation as currently executed.

Myocardial lactic acid metabolism was analyzed in virtually all subjects, at rest and during infusion of inotropic catecholamine (isoproterenol or epinephrine).

Site of implant of pedicle was flexible and varied with site of disease. The potential site was anticipated initially from angiogram. Both a "Y" shaped pedicle and a single pedicle were used. In all, multiple perforations were made along the course of the portion of arterial pedicle to be implanted. The free blood flow was measured directly and averaged 60 ml. per minute and indicated adequate blood flow to the myocardium, provided extensive resistance by the intramyocardial vessels themselves did not prevail.

Four patients died during the 2 year observation. The first patient with an acute thrombosis, immediately after operation, and a second also died of acute thrombosis 10 days postoperatively. Both of these were thought to have been due to possible hypotensive episodes. The third death occurred 4 months later from acute posterior infarction with an area profused by the right coronary and unaffected by an implant. The fourth death, 10 months after operation, occurred from multiple pulmonary emboli. The remaining 36 have survived for 4 to 36 months after surgery. Twenty-one of these have shown subjective improvement in pain.

Exercise tests were infrequently performed post-operatively because of persisted ST-T wave inversion which was felt to be due to postoperative pericarditis and caused confusion in attempts to evaluate the electrocardiogram.

In 12 cases, the internal mammary was injected with Kr85 tagged saline solution. Clearance rates were normal in 10 patients with morphologically patent implants. In 2 patients both left ventricular and selective internal mammary injections of Krypton 85 yielded similar myocardial flows indicating that myocardial Krypton was cleared by the same coronary basculature. This virtually excluded the possibility of an AV shunting, an important theoretical objection to this operative procedure.

Selective myocardial lactate sampling of various sites within the coronary sinus was carried out in 9 patients during isoproterenol induced stress to cardiac action both before and after operation. These samplings suggested a change from anaerobic to aerobic metabolism in 6 of 9 patients studied. There was improvement in the ability of the myocardium to metabolize oxidatively without resorting to glycolysis and production of lactic acid, as had occurred before surgery. Conversely, evidence that the implant has primarily a local effect was demonstrated in 2 patients. It was expected that ischemia would persist in the region of myocardium profused by diseased right coronary vessels and indeed this was confirmed by metabolic sampling. These data suggest that there has been definite but selective improvement in the oxidative potential of a portion of the myocardium in the presence of extra blood supply from the internal mammary artery. On the other hand, in one patient with improvement in angina pectoris and a patent implant, there was no change and possibly aggravation of myocardial glycolysis as revealed by lactate production. This emphasizes the need for more than angiographic assessment of the physiologic significance of any revascularization procedure.

The authors conclude that this 24 month experience with internal-mammary-artery surgery for relief of angina pectoris and myocardial ischemia justifies cautious optimism and that there is sound morphologic and physiologic evidence that the operation revascularizes a portion of the human heart. (Abstracted for the Middle Tennessee Heart Association, by Charles A. Trahern, M.D., Clarksville.)

# Historical Clinical Notes\*

JEAN W. ROUGHGARDEN, M.D.,† Nashville, Tenn.

As practicing physicians, we all like to feel that the therapy which we prescribe for our patients is the most modern and up-to-date possible. However, in the case of angina pectoris the basic principles of therapy have not changed in at least the past sixty years, as the following two reports vividly illustrate.

These two astute physicians managed to conduct scientific observations on themselves every whit as carefully documented and probably no more biased than any recent study. In addition, they express themselves in clear and often graceful English.

A 60 year old London physician, referred to as Dr. X by the author, describes his illness in an article entitled "Breast Pang," Heart 1:230, 1909-10.

"On the morning of 7th March, 1908, while reading the daily paper after a breakfast consisting of a rasher of bacon, a few pieces of dried toast and a cupful of coffee, I became conscious of a dull, aching pain at the chest. Afterwards for a few seconds only did my mind continue centered in the news. For the pain, at first felt in the midline beneath the upper part of the sternum, was now extending upwards to the throat, finally to reach the molar region of the jaws, backwards towards the scapulae and laterally to the axillae, elbows and wrists. Moreover every moment it was increasing in intensity.

"The most extreme manifestation was focused, and could be located, with some degree of exactitude, in the region lying behind the *manubriosternal synchondrosis*, while painful sensations of lesser magnitude continually radiated from this centre towards the back, neck and arms. Pain did not extend below the plane of the diaphragm, neither was it accompanied by faintness, sickness, or embarrassment of breathing. The pulse was irregular, its rate was rapid enough to be beyond my powers of computation. The radial artery, usually full and strong, felt small and thread-like. The skin was wet with perspiration.

"It is said that persons stricken by angina pectoris are distressed with forebodings of impending death. I am not conscious of having entertained any apprehensions of this character. My mind was clear and capable of concentrated thought. I considered the situation for a few seconds in expectation that the symptoms would

pass off, but the pain gathering strength rather than abating, I determined that something must be done quickly to obtain relief from my intolerable sufferings. At length I wrote a prescription for nitrite of amyl and sent it by messenger to a neighbouring chemist.

"The effort attendant upon this action greatly aggravated my sufferings. Neck and molar pain was intensified. Vision became affected. Objects seen at a distance across the room seemed to stand in a dark field surrounded by mist which rolled in eddies from centre towards circumference.

"I had been in extreme pain for twenty-five minutes when the messenger returned, bringing with him a supply of nitrite of amyl capsules. Taking one, I crushed it and inhaled the vapour. Immediately I felt relief, which first reached the jaws, neck and arms, and afterwards the chest. A sore feeling still remained in the substernal region which afterwards was removed by inhalation of fumes from a second capsule. Fifteen minutes later I was attending to the requirements of patients waiting to see me, and except for some shakiness of the limbs feeling no worse for my recent experiences."

Dr. X goes on to describe his preceding 15 months of exertional angina, and how he treated himself. At the outset, his systolic pressure averaged 165, ranging from 120 at rest to over 200 with exertion. He first placed himself on a diet consisting mainly of milk, eggs, vegetables, fruit and bread. On this, he gained 28 pounds in 8 months, mostly through his abdomen. His resting blood pressure fell, but his exertional angina increased in frequency and severity, and he began having spontaneous pain, the first attack being described above.

He then switched to a high protein, low carbohydrate diet. In ten days he had lost 9 pounds and was less flatulent. He was able to walk 150 to 200 yards without pain, in contrast to only 20 to 30 yards before, and had less blood pressure elevation with exertion. After 2 months, he had lost 28 pounds, and was able to walk 2 miles without pain. After 9 months, his weight had fallen 32 pounds. His blood pressure was 130 systolic at rest and did not rise excessively with exertion. He could walk 7 or 8 miles without pain, used no nitroglycerine,

\*From the Tennessee Heart Association.

†From the Department of Medicine, Vanderbilt University School of Medicine, Nashville, Tenn.

because pain was promptly relieved by rest, and no longer suffered from his long customary dyspepsia.

An American practitioner, M. B. Smith, writes of "Personal Experiences in Angina Pectoris," in 1903 (Medical Age 21:921, 1903), well aware that "much of the medical knowledge of this day has come from the work of physicians on their own cases, or from the impetus that they have received from the fact that they were sufferers from certain diseases." Selected quotations illustrate his views on the subject of angina, which he had for 15 years.

"Again, violent sustained work coupled with mental anxiety is peculiarly liable to produce angina; I have found that many old football players have the disease. The exertion and the anxiety work together with dire results."

His lack of success in the therapy of his own angina with amyl nitrite is described.

"In my case it made me feel ten thousand times worse; the pain may have been relieved, but there was a sense of impending death which the drug made worse, and a fulness of the head that was simply terrifying. . . . Hence, I am forced to this conclusion: the way to treat angina pectoris is to make the patient live in such a manner that the possibility of the attacks is decreased. . . . As a rule you will find these sufferers are busy business men with heavy anxieties; these strains must be removed." He admits that they will object, but "It will not do; your patient must lead a quiet, comfortable life, getting plenty of sleep, good food, and exercise. It is here that I believe golf is of use; many men have found it has cleared their brains, stimulated their hearts, and removed anxieties."

"There is another feature which I have seen mentioned in no text-book or article on angina. It is that angina changes the character of its victim; for example instinctively such a man will avoid the things which produce these symptoms until it will change a combative man into the veriest coward."

He felt that this had definitely helped him to avoid possible stresses—either human or situational. He was well aware of the truth of John Hunter's well known statement, "My life is in the hands of any rascal who chooses to annoy or tease me," as seen in the following quote.

"Another phase angina has produced in me is that of temper. As I have said, I will go miles to get out of the way of unpleasant people, but in the past I have found it occasionally impossible. Then realizing I was in for an attack of angina, I have felt so outraged that any one would jeopardize my life, even unwittingly, my anger has been excessive. . . . I do not seem to be able to control this; my reasoning powers are opposed to it, but it seems as if the paroxysms which come on at this time produce a state of almost delerious excitement."

He concludes his article by saying, "Surely my treatment of my own case has been a success. I would rather be alive and live along quietly and unassumingly than be dead, with a big notice in the Journal of the American Medical Association."

It appears that modern medicine has only been able to confirm these results in larger groups of patients, and then to transmit the information to us in a considerably less entertaining fashion.

\* \* \*

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From the  
Executive  
Director

# THE MEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### SUMMARY OF TMA BOARD OF TRUSTEES ACTIONS—OCTOBER 1-2, 1966

#### Meeting with National Association of Blue Shield Officers

- Members of the Board of Trustees, the Executive Committee of TMA's Health Insurance Committee, and the staff met on October 1, in Nashville, with officers of the National Association of Blue Shield Plans, representatives of the Tennessee Hospital Service Association and the Memphis Hospital Service & Surgical Association, for the purpose of discussing Blue Shield in Tennessee. The Chairman of the Board and the Executive Vice-President of the National Association of Blue Shield Plans had requested such a meeting with the TMA Board for the purpose of a wide ranging discussion on Blue Shield plans in Tennessee.

Usual, customary, and prevailing fees, was one of the subjects discussed. Another subject included whether or not the medical profession in Tennessee desired Blue Shield as a mechanism for prepaying medical care and whether or not such could be effectively brought about in the state. Considerable discussion was presented on the relationship of the National Blue Shield to local Blue Shield plans. Other discussions included the obtaining of profiles covering physicians' fees in Tennessee --- the physician's satisfactory fee --- service benefits and adequate representation on Blue Plan Boards. No official action was taken as the result of the discussions.

#### BOARD OF TRUSTEES MEETING - OCTOBER 2

#### TMA Council Reports On Corporate Practice

- Dr. John H. Saffold, Knoxville, Acting Chairman of the Council, reported to the Board on the progress being made toward resolving the problem of corporate practice and separate billing by hospital-based specialists. Misunderstanding and lack of two-way communication are reasons for the lack of effectiveness in the progress toward separate billing by hospital-based specialists. The Council urged a united effort by all members of the Tennessee Medical Association regarding corporate practice. An early conclusion of corporate practice is urged by the Council.

#### Health Careers Program

- Health Careers, sponsored by the Tennessee Hospital Education and Research Foundation, is underway with a study for the feasibility of raising funds to support the health careers recruitment and education program. The Board heard a representative of the Foundation outline the proposed program, and approved of sending a letter to the membership explaining and calling attention to this drive.

#### Title XIX—Medicare

- The Chairman of the Committee on Governmental Medical Services reported on meetings with Governor Clement, Governor-Elect Ellington, and other state officials, concerning the implementation of Title XIX in Tennessee. A thorough discussion was conducted on Title XIX and an educational

film was shown. Problems confronted by the fiscal intermediary in implementing Title XVIII-B were also reported.

#### **Regional Medicare Conferences**

- A number of problems have risen throughout the state in the smaller communities relative to payments of claims and physicians' fees under Medicare. As a result, additional informational conferences were found to be necessary to inform physicians and their office staffs. TMA, in cooperation with the Equitable Life Assurance Society of the United States, fiscal carrier in Tennessee for Medicare, has arranged for eleven additional conferences to be held across the state. Conferences have been held in Kingsport, Johnson City, Paris, Dyersburg and Jackson. Others are scheduled for Clarksville, Shelbyville, Columbia, Cookeville and Cleveland.

#### **Other Board Actions**

- ---Heard a report from TMA's attorney relative to an appeal before the State Tax Equalization Board for a reduction in the property taxes on the TMA headquarters in Nashville ... Heard a report from the Committee on Legislation and Public Policy relative to the legislative program in the 1967 Tennessee General Assembly. Approved \$2500 for expenses and services necessary in operating a First Aid Station to be established in the Capitol during the legislative sessions for the legislators ... Approved the employment of Mr. Jerry Flippin, Milan, Tennessee, to assist with the TMA legislative program in the 1967 General Assembly ... Approved a request of the TMA Woman's Auxiliary for the insertion of one page in the Journal each quarter for a report of Auxiliary activities ... Discussed requirements under the Law and the composition of a Medical Advisory Committee for Title XIX to the State of Tennessee. No appointments were made, pending an official request from the Governor ... Considered additional names to be submitted to the AMA Board of Trustees for appointment to AMA Councils, Committees, and Boards ... Approved a request from the Tennessee Hospital Association to cooperate in presenting seminars in 1967 for administrators of long-term care facilities ... Heard a report from the Executive Director relative to availability of property adjoining the TMA headquarters building ... Approved the 1967 Budget, as amended, to conduct the business of the Association in fiscal year 1967.

#### **Are There Enough Nurses to Go Around?**

- No, but some progress in increasing their number has been made in the past year. About 621,000 registered nurses are practicing in the U. S. today, a 6.7% increase over the 1964 total of 582,000. There are 319 nurses per 100,000 population today, compared with 306 per 100,000 in 1964, according to the new edition of "Facts About Nursing," published by the American Nurses Association.

#### **Heart, Cancer, Stroke Program in Tennessee**

- Vanderbilt School of Medicine and Meharry Medical College have made a joint application and received a planning grant to study approaches to development of an effective program dealing with heart disease, cancer and stroke. The planning grant of \$267,841 for the fiscal year ending June 30, 1967, has been made. This is the tenth such grant made in the nation. The program covers the Tennessee Mid-South regional area. This generally covers East and Middle Tennessee, portions of Southern Kentucky and Northern Alabama. Visitation committees are now in the process of meeting with representatives of some 145 hospitals, 54 local medical societies and 9 dental societies involved in the health needs of approximately 3,250,000 people in this general area. The contacts have been made to explain the cooperative program dealing with heart disease, cancer and stroke as authorized in Public Law 89-239.

# Public Service

THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

## Mental Health Congress Conducted

- The Second Tennessee Congress on Mental Illness and Health, co-sponsored by the Tennessee Medical Association, the Woman's Auxiliary to the TMA and the Tennessee Mental Health Association, was held in Nashville, October 12-13 with just under 500 persons in attendance.

The meeting attracted more interested physicians, clergy, social workers, nurses, attorneys and others than the first Congress which was held in the Fall of 1963.

An outstanding program of nationally recognized people was arranged by Dr. Frank H. Luton, chairman of the TMA Mental Health Committee and the Congress Steering Committee, with assistance from Drs. Lloyd Elam, Henry B. Brackin, Jr. Charles B. Smith and Charles A. Trahern.

Governor Frank Clement delivered the opening session keynote address and Dr. Charles L. Hudson of Cleveland, president of the AMA was the featured speaker at a banquet which attracted over 225 persons.

- The Fourth Tennessee Rural Health Conference conducted in Cleveland, Tennessee on October 19th set a new attendance record with a registration of 281 persons.

The meeting, co-sponsored annually by the Tennessee Medical Association, Farm Bureau Federation and the University of Tennessee Agricultural Extension Service, was attended by physicians, home demonstration club members, extension service personnel, county agents and farm bureau personnel. Meetings the past three years have been held in Knoxville, Jackson and Nashville. Attendance has increased each year. Two hundred and ten persons attended the 1965 meeting in Nashville.

Program participants included Mr. Lonnie Safley, assistant to the President of the Tennessee Farm Bureau; Mr. Whalen Strobar, AMA field representative; Dr. John H. Saifold, president of the Tennessee Academy of General Practice; Mr. Robert A. Youngerman, attorney for the AMA Department of Investigation; and Webster Pendergrass, Dean of the University of Tennessee College of Agriculture.

Dr. Julian C. Lentz of Maryville is chairman of the TMA Rural Health Committee.

- Governor Frank G. Clement issued a proclamation last month proclaiming the week of October 16-22 as Community Health Week in Tennessee.

The annual observance was promoted by the TMA Communications and Public Service Committee and many county medical societies appointed special Community Health Week committees to publicize the event in their hometowns.

Governor Clement said health is the most priceless possession of every man, woman and child and a high level of health is vital to the safety, growth and progress of our state and its many people. Americans today are living longer, healthier lives than ever before in history because of the enormous advances made in medicine during our lifetime, the Governor said.

## 4th Rural Health Conference Sets Attendance Record

## Governor Proclaims October 16-22 As Community Health Week

Dr. O. Morse Kochtitzky, chairman of the TMA Public Service Committee, and Dr. L. Armistead Nelson, chairman of the Nashville Academy of Medicine's committee, attended the proclamation signing at the State Capitol.

### **Medicare Amendments Being Pushed**

● The National Council of Senior Citizens, supported by the AFL-CIO, is making a strong effort to have the Medicare law amended. The organization's monthly publication, SENIOR CITIZENS NEWS, calls for several amendments in the law to include establishment of a fixed schedule of fees for medical services under the Medicare law, with no provision for charges beyond such fees; payment of fees for the service of medical specialists under the basic hospital insurance program; inclusion of all persons who are disabled and all coverage of all women at age 62 and elimination of all deductible and co-insurance features of the program. The publication also urges recipients to encourage their physicians to accept assignments and to report any charges they feel are too high to the organization that handled the claim and to the National Council of Senior Citizens.

The increasing political activity by county and state organizations of the American Medical Political Action Committee (AMPAC) in supporting conservative candidates also came under fire.

### **Quackery Congress Exposes Chiropractic As A Cult**

● The third national congress on medical quackery, held in Chicago October 7-8, devoted a major portion of the meeting to exposing the cult of chiropractic. It was pointed out that the public is ignorant of the scope and character of chiropractic practice and that few people realize the cult believes not in scientific facts but in the theories of a 19th century fish-peddler who practiced "magnetic healing."

A new booklet, "Chiropractic: The Unscientific Cult," prepared by the AMA Department of Investigation, was introduced at the meeting and is available now from the AMA. The booklet contains information obtained from textbooks used in chiropractic schools, literature presently dispensed at chiropractic school bookstores, statements by chiropractic leaders in current chiropractic journals and reports and official records of the courts.

Pamphlets for use in physician's waiting rooms which expose the cultist practice are also available from AMA and physicians are urged to obtain and display this material in those areas of the state where chiropractors are prevalent.

● The House Ways and Means Committee has reported out amendments to the Title XIX portion of P.L. 89-97 which would restrict the program of aid for the medically indigent by disqualifying some adults from benefits.

The program now allows federal matching grants for state programs providing medical benefits for dependent children and their parents. The amendment adopted by the committee would limit aid to parents who are disabled, blind, or receiving cash welfare payments. It was reported that, if adopted, the amendments would save some \$80 million in federal money, and that without the restrictions federal long-range costs could run as high as \$3 billion annually.

The recommendations of the consultant firm employed by the State of Tennessee to study and report findings regarding the establishment of a Title XIX program in Tennessee is due to be completed in mid-November.

The Governmental Services Committee of TMA has met on several occasions with the consultants and have made several recommendations regarding implementation in our state including payment of physician's fees on a usual and customary basis and the use of the Department of Public Health as the state agency to administer the program.

### **Title XIX Amendments Proposed**

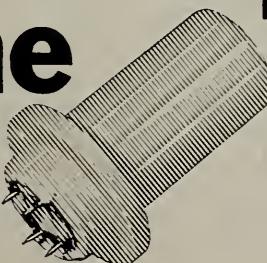
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# President's Page



DR. HUBBARD

TMA's annual membership dues increase of \$15.00 (a total of \$55.00 per year) is effective January 1, 1967.

Despite the House of Delegates unanimous approval of the increase, it is predictable that dues notices from the county societies may cause some dissent among the membership.

The medical profession has entered an era of significant social welfare revolution and a remodeling of the economic aspects of health care is underway. There is real danger during the next ten years that the architects of the present revolution—may do great harm to the profession and to the public health in their efforts to insure "the good life" for all Americans. Perhaps medicine has made a great mistake in failing to evaluate the demand of the public for greater availability and accessibility to medical care.

We must be more watchful of a developing situation; to do otherwise is poor preventive medicine, and no after-the-fact therapy is likely to change our status once it is established, better or for worse, by the social planners.

The future of the important issues under which we practice is in the hands of our medical associations—primarily the county societies, the State Medical Association and the AMA. By failing to reinvest a relatively small portion of our earning power in its preservation, in the preservation of our professional freedom, and for the good of the public health, would be unwise.

Let us not permit a division in our ranks. We need to unify *organized* medicine, because our problems can only be dealt with effectively (if at all) by the maximal degree of unity.

The medical organizations to which we all belong are the proper arenas for discussion—are the optimal vehicles for external action.

The unified capabilities of our organizations must be increased in direct proportion to the challenges. With ever-increasing inflation, it requires considerably more money to finance the activities of our medical organization than at any previous time. Our operations and programs must continue at maximum. The dues increase is a modestly constructed step in the direction we must take if we hope to direct the course of our destiny.

AMA dues will also be stepped up next year. The AMA also needs maximal support from all in the profession.

Dues increases are needed just to maintain the level of service which the associations have provided over the years.

In addition to the added expense of merely keeping "in the same place", medical organizations in recent years have been faced also with the problem of meeting the demands of their members for new and expanded services. Even a cursory review of the proceedings of the governing bodies of TMA or AMA will verify this assertion. Item after item calls for initiation of new programs, extension of existing activities, study of rapidly changing facets of medical practice, etc. Much of this increased activity is, of course, directly related to the increasing involvement of government in the health care field.

As long as members of a not-for-profit organization demand more and more service from their organization, they must be ready to pick up the bill for the resulting higher expenses.

President

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NOVEMBER, 1966

# EDITORIAL

## CANCER AND VIRUSES

The relationship between viruses and cancer has been one which has intrigued physicians and laymen since Peyton Rous first demonstrated the cancer virus in animals more than 50 years ago. Although direct evidence for an association between cancer and viruses in man is presently nonexistent, there has been much interest about this possible relationship. Not only is there frequency of association between viruses and cancer in a number of different animal species and similarity of human and animal cancers under the microscope, but there is also the possibility that early diagnosis, treatment and prevention of this disease might be effected and a therapeutic vaccine developed if viruses are, in fact, related to cancer.

It is now widely recognized that cancer is a disease of individual cells and is characterized by a loss of the normal control of cells, particularly of cell growth. Such cells

tend to run wild, without regard for other cells, and can destroy normal cells as well as their own kind if they be in the way. Frank L. Horsfall, Jr.<sup>1</sup> emphasizes this concept since he thinks that the individual cell rather than the recognizable tumor is the key to the cancer problem. Clearly, if cancer cells could be eliminated or if their development could be prevented, the problem of cancer could be solved.

The work of John Enders at Harvard has made it possible to cultivate almost any type of cell in the laboratory and to keep such cells growing more or less indefinitely. Normal cells in culture tend to produce normal cells and cancer cells produce cancer cells and, in fact, can do so indefinitely. Since the change is transmitted continuously from one cell to another, something must have occurred in the cell nucleus. The change that characterizes cancer cells in humans must involve one or more of the 46 chromosomes in the nucleus of such cells. It is possible to observe the transformation from a normal to a cancer cell, both animal and human, in tissue culture. Such a change can be readily initiated by inoculation of a suitable virus into normal cells. Enders employed monkey virus, SV-40, to effect such a cancerous transformation of human cells in culture. Horsfall concludes that cancer is one, not many different diseases. The different types of neoplastic change are simply evidences of the same cellular change initiated in different kinds of cells, in different sites and in different organs. The underlying cellular change seems to be similar in all instances.

The different frequencies of cancer sites in men and women also reflect the importance of the genetic constitution in this disorder. It is well recognized that sex is genetically determined and attributable to but a single pair of the 46 chromosomes in human cells.

Of the many known viruses, approximately 30 are capable of inducing cancer in animals of various species. Some strains of virus are able to induce cancer in several different animal species. The virus known to cause warts in humans will produce can-

1. Horsfall, Frank L., Jr., Cancer and Viruses, Bull. New York Acad. Med. 42:167, 1966.

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cer in rabbits but will not cause cancer in humans. Interestingly, a virus found in certain plants can induce cancer in frogs. Almost all leukemia in mice has been attributed to a virus. Finally, the polyoma virus of mice has been shown to produce not only different types of cancer in several animal species but also several types of cancer in a single animal.

Of great interest is the finding that the nucleic acid core which can be extracted from the virus and even the DNA alone will transform normal to cancer cells after injection into newborn animals.

The magnitude of the problem is exemplified by the knowledge that there are 60,000 molecules of DNA contained in the 46 chromosomes of a human cell. It is conceivable that only a few of these 60,000 molecules of DNA must be altered to produce the cancerous change in cells. Finding the altered molecule may be likened to finding a needle in a haystack. Thus, it may take much time and effort to find what and how the DNA molecules are altered so that cancer cells are produced from normal cells. Obviously this is a most important problem to solve.

As one surveys the work done by various researchers on the association of viruses and cancer in animals, it is difficult to defend the idea that viruses have nothing to do with some human cancers. The hope for the future lies in proving that there is an etiologic relationship of viruses to cancer in humans and the eventual successful utilization of this information for eradication of this dread disease.

A. B. S.



## THE MILLIS REPORT

Early in this century, Dr. George H. Simmonds of the American Medical Association, and its Council on Medical Education collected data upon the sorry state of medical education in this country at that time. The Board of Trustees of the AMA sought the help of the Carnegie Foundation for the Advancement of Teaching and turned its data over to Abraham Flexner, Ph.D., who reported his findings and suggestions in

1910—the study to become known as *The Flexner Report*. Though this report was to have an immense impact on medical education and medical care, it did elicit at that time criticisms of being “unsympathetic, incomplete and superficial.”<sup>1</sup> Nevertheless, “The report shut down half the medical schools then in existence mostly proprietary schools operated for money or prestige. It defined the needs of medical schools, their organization and function. It brought in its wake standardization of medical schools, which in the last forty years has done much to improve the quality of medical teaching and training.”<sup>2</sup>

About three years ago, the Council on Medical Education, considering the complexities of graduate and continuing education of physicians, appointed a Citizen's Commission under the chairmanship of John S. Millis, Ph.D., and president of Western Reserve University, Cleveland. Its ten members included three physicians. The Commission's report<sup>3</sup> to the Board of Trustees of the AMA was made public within recent weeks under the title “The Graduate Education of Physicians,” which without doubt will become known for short as *The Millis Report*.

Though I have read the report, word for word, it would be foolish to offer a critique “off the cuff.” Portions of it will be controversial and in areas may strike one as superficial, though this is probably an unfair statement. Study in depth offered background, I am sure, for a report which would lose effectiveness if it became tangled in detail. One may hope that subsequently an analytical report may come from the Commission, cataloging the wealth of information which must have been presented to the Commission. This would be of inestimable value to the medical educator.

For the moment, the purpose of this edi-

<sup>1</sup> Robinson, E. E. and Edwards, P. C., editors: *The Memoirs of Ray Lyman Wilbur 1875-1949*. Stanford, Calif. Stanford Press. 1960. pp. 81.

<sup>2</sup> Rowntree, L. G.: *Amid Masters of Twentieth Century Medicine*. Springfield, Ill. Charles C. Thomas Co. 1958. pp. 361.

<sup>3</sup> *The Graduate Education of Physicians*. The Report of the Citizens Commission on Graduate Education. Chicago, Ill. American Medical Association. 1966.

# MOLECULAR REMODELING—

*laboratory exercise or clinical necessity?*

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

### Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.<sup>1</sup> Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,<sup>2</sup> the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.<sup>3</sup>

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.<sup>4</sup> However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.<sup>5</sup>

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors—in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.<sup>6</sup> The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.<sup>7</sup> And, like its predecessor, acetazolamide precipitated mild acidosis. Its prolonged use could result in hypokalemic acidosis.<sup>7</sup>

### The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide

group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.<sup>8</sup> Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.<sup>9,10</sup>

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.<sup>11</sup> It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.<sup>11</sup> The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.<sup>11</sup> Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.<sup>7</sup>

### Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.<sup>12</sup>

One of these, Naturetin, Squibb Ben-droflumethiazide, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with

doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."<sup>13</sup>

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (benzoflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

**Contraindications:** Severe renal impairment; previous hypersensitivity.

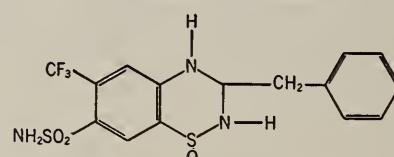
**Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

**Precautions:** The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

**Side Effects:** Ben-droflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

**Supplied:** Naturetin (Squibb Ben-droflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin ē K [Squibb Ben-droflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

**References:** 1. Southworth, H.: Proc. Soc. Exper. Biol. & Med. 36:58, 1937. 2. Mann, T. and Keilin, D.: Nature 146:164, 1940. 3. Pitts, R. F., and Alexander, R. S.: Am. J. Physiol. 144:239, 1945. 4. Schwartz, W. B.: New England J. Med. 240:173, 1949. 5. Friedberg, C. K., in Moyer, J. H., and Fuchs, M.: Edema Mechanisms and Management, Philadelphia, W. B. Saunders Co., 1960, p. 259. 6. Cumming, J. R.; Tabachnick, E., and Seelig, M., in Moyer, J. H., and Fuchs, M.: op. cit., p. 254. 7. Werko, L., in Moyer, J. H., and Fuchs, M.: op. cit., p. 188. 8. Beyer, K. H., Jr., in Moyer, J. H., and Fuchs, M.: op. cit., p. 274. 9. Maren, T. H., and Wiley, C. E.: J. Pharmacol. & Exper. Therap. 143:230, 1964. 10. Earley, L. E., and Orloff, J.: Ann. Rev. Med. 15:149, 1964. 11. Fuchs, M., and Mallin, S. R., in Moyer, J. H., and Fuchs, M.: op. cit., p. 276. 12. Ford, R. V., in Moyer, J. H., and Fuchs, M.: op. cit., p. 290. 13. cited in Fuchs, M., and Mallin, S. R. (ref. 11): op. cit., p. 283.



## Naturetin®

SQUIBB BEN-DROFLUMETHIAZIDE  
to reduce excess fluid  
or high blood pressure



torial comment is to make members of the medical profession aware of the Report and its background. Many comments about it have already appeared in the lay press and more will be forthcoming,—this is certain.

Though the immediate impact of the *Millis Report* will not be of the order of the *Flexner Report* which changed the pattern of medical education within a half-dozen years, it will without a doubt influence thoughts and concepts within the profession, both practicing and teaching, and similarly without doubt will influence Washington bureaucracy and legislation. (Today's immediacy of communication often eliminates a lag between concept and implementation, which at times is unfortunate if implementation is hurried and "half-baked," to be terrifically wasteful and actually slow progress through the needs of a fresh start.) Concepts quickly pervade general thinking. Those of us who were on The Joint Study Committee in Continuing Education appearing as *Lifetime Learning for Physicians* from the pen of Dr. Bernard V. Dryer,<sup>4</sup> Study Director, in 1962, recognize what would almost appear to be paraphrasing of portions of it in the Report of the President's Commission on Heart Disease, Cancer and Stroke (DeBakey Report) as well as in the current report upon "The Graduate Education of Physicians." Immediately following Dryer's report in 1962, we on the Commission and others received a 56-page mimeograph communication from Hubert Humphrey, then Chairman of the Subcommittee on Reorganization and International Organizations, devoted to "An Action Program for Strengthening Medical Information and Communication." It quoted the *Lifetime Learning for Physicians* as part of the background material for his suggestions of implementing informational systems in Federal and other agencies. Thus, I anticipate that portions of the *Millis Report* will be reflected in forthcoming legislation dealing with medical education and care.

This review of the background of the "Report on Graduate Education of Physicians"

should be of interest as the reader is attracted to comments upon the Report which will appear here and there.

R. H. K.

## DEATHS

**Dr. George Paul Zirkle**, 89, Kingston, died September 9th at his home.

**Dr. Robert Edward Sullivan**, 77, Nashville, died September 23rd at his home following an extended illness.

**Dr. Dale William Mattson, Jr.**, 40, Cookeville, died October 9th at his home.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

### Chattanooga-Hamilton County Medical Society

Mrs. Sue Boe, Field Representative, Woman's Organizations, AMA, was a guest speaker at the dinner meeting of the Society, held at Morrison's Cafeteria on November 8th.

The scientific presentation, an interesting case report, was made by Dr. Gene H. Kistler.

As a public service project, the Chattanooga Society, in cooperation with the Area Safety Traffic Committee, is distributing a pamphlet, published by the American Medical Association, entitled "Are You Fit to Drive." Publication of the pamphlet was prompted by the recent findings of the AMA committee of Medical Aspects of Automotive Safety, concerning the physical condition of drivers as it relates to traffic accidents.

### Knoxville Academy of Medicine

The legal aspects of medical practice were discussed at the meeting of the Academy on October 11th by Mr. Joseph B. Yancey and Mr. Warren Butler, Attorneys. The meeting was held in the Academy of Medicine Building.

### Roane-Anderson County Medical Society

A dinner meeting of the Roane-Anderson County Medical Society was held on September 20th in the Dining Room of Oak Ridge Hospital. Guest speaker was Dr. James L. Siverman, Ph.D., Associate Direc-

<sup>4</sup>Dryer, Bernard V.: Lifetime Learning for Physicians. Report from The Joint Study Committee on Continuing Medical Education. J. Med. Educ. 37 (Part 2). June, 1962.

**brings  
peace to the  
hyperactive  
colon**



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### **helps restore normal motility and tone**

"In 40 of 44 cases of irritable or spastic colon, Cantil [mepenzolate bromide] or Cantil with Phenobarbital reduced or abolished abdominal pain, diarrhea and distention and promoted restoration of normal bowel function... Cantil [mepenzolate bromide] proved to be singularly free of anticholinergic side-effects... Urinary retention, noted in two cases was eliminated in one by reducing dosage."<sup>1</sup>

**IN BRIEF:** One or two tablets three times a day and one or two at bedtime usually provide prompt relief. Cantil with Phenobarbital may be prescribed if sedation is required.

Dryness of the mouth or blurring of vision may occur but it is usually mild and transitory. Urinary retention is rare. Caution should be observed in prostatic hypertrophy— withhold in glaucoma. Cantil with Phenobarbital is contraindicated in patients sensitive to phenobarbital.

**Supplied:** CANTIL (mepenzolate bromide)—25 mg. per scored tablet. Bottles of 100 and 250. CANTIL with PHENOBARBITAL—containing in each scored tablet 16 mg. phenobarbital (warning: may be habit forming) and 25 mg. mepenzolate bromide. Bottles of 100 and 250.

1. Riese, J. A.: Amer. J. Gastroent. 28:541 (Nov.) 1957

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tor Biology Division, O.R.N.L. Dr. Siverman's subject was "The Role of the Physician and the new Oak Ridge Biomedical Graduate School."

### **Memphis-Shelby County Medical Society**

Candidates for Congress of the 8th and 9th Districts, George Grider, Dan Kuykendall, Ray Blanton, and Julius Hurst addressed members and their wives at the meeting of the Memphis-Shelby County Medical Society on October 4th. The meeting was held in the auditorium of the Institute of Pathology, University of Tennessee.

A workshop for Memphis physicians and ministers on the fatally ill patient was sponsored by the Society on October 11th in the cafeteria of John Gaston Hospital. The workshop concerned itself with the doctor and the minister working together with a fatally ill person with the aim of a better understanding of what each is supposed to do. Informal sessions preceded the principal talk by Dr. Paul B. McCleave, Chicago, director of the department of medicine and religion of the American Medical Association. Dr. McCleave is an ordained Presbyterian minister.

### **Hamblen County Medical Society**

Dr. Joe M. Capps, Assistant Clinical Professor of Neurosurgery at Vanderbilt University Medical School, was the guest lecturer at the meeting of the Hamblen County Medical Society on September 6th. Dr. Capps spoke to the Society on the "Management of Head Injuries."

## **NATIONAL NEWS**

### **The Month in Washington**

(From the Washington Office, AMA)

A new minimum wage law is expected to cause hospital and nursing home costs to rise. It brings about 1.5 million workers in hospitals and nursing homes under the federal minimum wage program for the first time. The minimum wage for them is set at \$1.00 an hour for next year, \$1.15 an hour in 1968, \$1.30 an hour in 1969, \$1.45 an hour in 1970 and \$1.60 an hour thereafter.

The new law also increases the minimum wage for about 30 million workers presently covered to \$1.40 an hour on February 1, 1967, and to \$1.60 an hour on February 1, 1968.

On a related front, Senate Democratic Leader Mike Mansfield (Mont.) said he believed the Health, Education and Welfare Department was going too fast in enforcing racial desegregation of southern hospitals and schools. He told newsmen he supported the Senate's denial of \$500,000 sought by HEW to pay civil rights investigators. He said the Senate wants to see desegregation handled carefully rather than impulsively.

Hospital and school authorities "will be on trial," Mansfield said, and if they abuse the suggested latitude, Congress can move quickly to correct the situation. "We have to take things slowly . . ." he said. "This is an area of great delicacy. The thing to do is to do it right and not precipitously."

The Senate approved legislation that would give nursing homes more liberal payment for medicare patients. The bill amends the definition of reasonable costs to include return on the fair market value of the facilities. The existing federal reimbursement formula is two percent above operating costs. Nursing home operators contend this is too low.

HEW Undersecretary Wilbur Cohen said the government will watch carefully to determine whether patients are admitted unnecessarily to hospitals next year in order to qualify them for medicare's nursing home benefits. The law requires that nursing home benefits be made available only to medicare beneficiaries who have had a hospital stay of three days or more and only when the nursing home care is considered an extension of the hospital treatment. However, several bills have been introduced in Congress to eliminate the hospital stay requirement.



The American Medical Association supported a bill that would extend the air pollution program and authorize increased appropriations for it. In a letter to a Senate subcommittee, Dr. F. J. L. Blasingame, executive vice president of the AMA, noted that the association's House of Delegates in

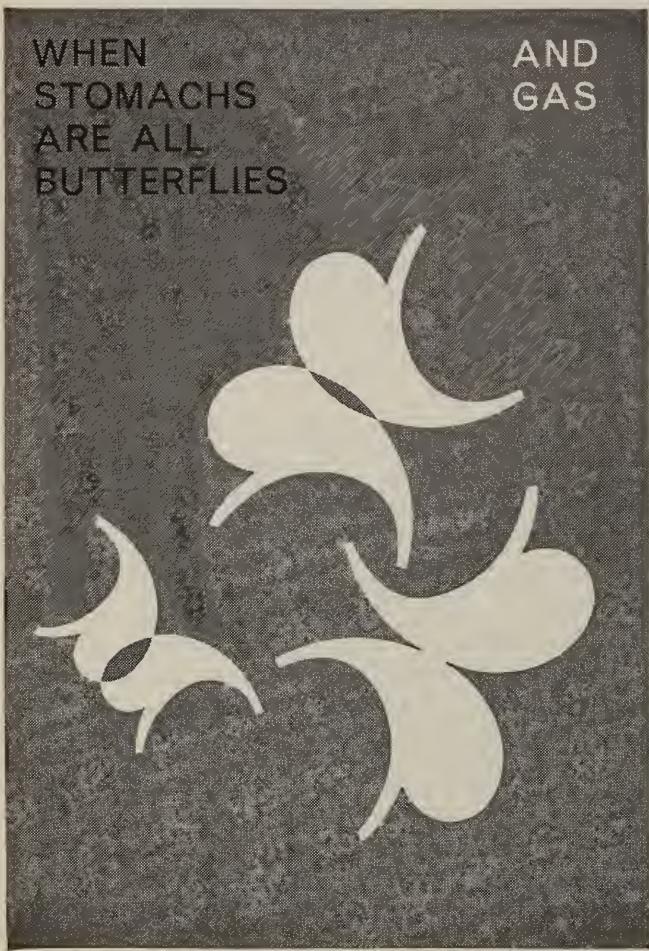
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Each tablet contains:

Dactil® (piperidolate hydrochloride), 50 mg.; Standardized cellulolytic\* enzyme, 2 mg.; Standardized amylolytic enzyme, 15 mg.; Standardized proteolytic enzyme, 10 mg.; Pancreatin 3X\*\* (source of lipolytic activity), 100 mg.; Taurocholic acid, 15 mg.

\*Need in human nutrition not established.

\*\*As acid resistant granules equivalent in activity to 300 mg. Pancreatin N.F.



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AND  
GAS

In chronic or acute indigestion, fluttery, gassy stomachs obtain prompt, gratifying relief through the antispasmodic, surface anesthetic and enzymatic activity of Dactilase. Dactilase decreases hypermotility and pain and reduces the production of gas. Dactilase does not induce stasis, but helps restore normal tone. It has little or no effect on enzyme secretions, but adds enzymes, thus contributing to the digestive efficiency of the patient.

#### Side Effects and Contraindications:

Dactilase is almost entirely free of side effects. However, it should be withheld in glaucoma and in jaundice due to complete biliary obstruction.

**Administration and Dosage:** One tablet with, or immediately following, each meal. Tablets should be swallowed whole.

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June, 1965, had adopted a statement recognizing the health hazards resulting from air pollution and recommending that feasible reduction of all forms of air pollution should be sought by all responsible parties. The pending bill (S. 3112) "can further this end," he said.

"We believe the effect of this amendment will be beneficial," he said. "The grant mechanism should bolster local and regional operations, encouraging a greater degree of local initiative, particularly in interstate and intermunicipal areas. In addition, the bill would eliminate a serious inequity in the present law. Certain metropolitan regions are penalized in that they cannot obtain assistance for maintaining their currently large and expensive programs, while a metropolitan region without a program could receive up to two-thirds of the cost of creating a new program. Under the proposed legislation this inequity would be eliminated."



The Senate cleared the path for a new approach to narcotics addiction which would substitute hospital treatment for long-term prison sentences.

The Senate approved the legislation by voice vote without dissent and sent it to a Senate-House conference committee for adjustment of differences with a House version.

The key to the bill is civil commitment for the addict involved in a non-violent crime. It would provide voluntary pre-trial commitment in lieu of prosecution and compulsory post-conviction commitment in lieu of punishment. In addition, the bill would provide voluntary and compulsory commitment of certain addicts not charged with any crime. The addicts would be committed to the Surgeon General for confinement and treatment in a hospital or institution. Treatment would continue within the community after the addict is discharged.

The legislation also would establish federal post-hospitalization treatment centers and also give courts more flexibility in dealing with youthful drug offenders.

Sen. John L. McClellan, D-Ark., who brought the bill to the Senate floor, said it

"affords an opportunity for narcotics addicts who wish to extricate themselves from a hopeless life of addiction and crime to have themselves committed for treatment."

"It also affords a civil, non-penal procedure for the compulsory commitment of addicts not charged with a crime so they may be cured and rehabilitated before they are forced by their addiction into a repetitious pattern of addiction and crime," he added.

Sen. Thomas J. Dodd, D-Conn., who for years has studied the problem of narcotics, said the bill "will lead to a wiser, more humane, and more effective treatment of narcotics addicts. . . ." He said the Senate was undoing the mistake of ten years ago when it wrote legislation which made "super-criminals out of many narcotics addicts."



An industry spokesman said drug makers and distributors will comply with a government request that the number of candy-flavored children's aspirins per bottle be limited to 25.

A limit of 50 tablets per bottle was agreed upon in a government-industry conference in 1955 and has been observed by producers of 95 percent of all children's aspirins. However, some authorities consider this number now to be dangerous, even lethal under some conditions, when taken by a child.

Instead of including a number-per-bottle limitation on children's aspirin in a "child protection" bill, the House Commerce Committee urged that the Food and Drug Administration seek voluntary cooperation from the aspirin industry. The spokesman said the industry would cooperate and that 25 one-quarter grains generally was accepted as a non-hazardous amount.

The House and Senate approved differing versions of the legislation which would ban the sale of children's toys containing hazardous substances. It was left for a conference committee to adjust the differences. Both versions also would ban dangerous household substances that cannot be made safe by cautionary labeling. These include such items as a flammable and explosive water repellent blamed for three deaths.

For cold hands and feet, nothing beats hot stoves—but they are awkward to carry around. Now Gerilid, in good-tasting take-along chewable tablets can provide rapid vasodilation of peripheral circulation, bringing real warmth to the extremities and decreasing sensitivity to sudden temperature change. Patients like Gerilid and know they are getting relief.

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nicotinic acid (niacin) 75 mg, and  
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**Administration and Dosage:** One or two chewable tablets 3 times a day before meals. If flushing is objectionable, dosage may be lowered. However, tolerance to flushing usually develops without loss of efficacy in regard to vasodilation. The recommended dosage should not be exceeded.

**Side effects:** Occasional lightheadedness or transient itching which may disappear with continued use. There are no known contraindications; however, caution is advised when there is a concomitant administration of a coronary vasodilator.

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## MEDICAL NEWS IN TENNESSEE

### Tennessee Valley Medical Assembly

The 14th Annual Tennessee Valley Medical Assembly, founded in 1953 by Dr. Wm. G. Stephenson and chairmaned in 1966 by Dr. Wm. R. Fowler, was held September 26-27 at the Tivoli Theater in Chattanooga. Nationally-known physicians and surgeons conducted special lecture sessions and served as guest panelists on symposiums. Dr. James Z. Appel of Lancaster, Pa., immediate past-president of the American Medical Association, presented the opening address entitled "The Current Status of Medicare, Titles XVIII and XIX." Other speakers included: Dr. Bentley P. Colcock, Boston; Dr. Eric E. Woolaege, Rochester, Minn.; Dr. Vernelle Fox, Atlanta; Dr. Joseph A. Freiberg, Cincinnati; Brig. Gen. Joe M. Blumberg of Washington, D. C.; Dr. Richard Overholt, Boston; Dr. Burtis B. Breese, Rochester, N. Y.; Dr. Charles J. Frankel, Charlottesville, Va.; Dr. James F. Glenn, Durham, N. C.; Dr. Noble O. Fowler, Cincinnati; Dr. James D. Hardy, Jackson, Miss.; Dr. Howard W. Jones, Baltimore; Dr. Robert D. Sullivan, Boston; and Dr. Wm. H. Moretz of Augusta, Ga.

A highlight of the meeting was the banquet held on Monday evening at the Patten Hotel. Calvin D. Johnson, director of customer relations, Remington Office Systems and Office Machines, Division of Sperry Rand Corporation, Washington, D. C. was the banquet speaker. His address was entitled, "Opportunities Unlimited" and dealt with an ardent defense of the free enterprise system and unlimited optimism concerning the future.

The annual assembly is sponsored by the Chattanooga-Hamilton County Medical Society and the program is acceptable for continuation study credit for participating physicians by the American Academy of General Practice.

### Regional Meeting American College of Physicians

Twenty-one physicians presented latest medical findings and developments at the

regional meeting of the American College of Physicians in Nashville, on September 10th. The meeting, for specialists in internal medicine in Tennessee and Kentucky, was arranged under the direction of Dr. Harrison J. Shull, Nashville, ACP Governor for Tennessee and clinical professor of medicine at Vanderbilt University School of Medicine, and Dr. Carl H. Fortune, Lexington, Kentucky, ACP Governor for Kentucky and professor of clinical medicine at the University of Kentucky College of Medicine. The College presents 29 regional meetings each year throughout the United States and Canada to keep its 13,000 members abreast of developments in internal medicine.

Dr. Irving S. Wright of New York City, ACP president and professor of clinical medicine at Cornell University Medical College, was a special guest at the Nashville regional meeting and presented the banquet address on "A Great Dilemma: Compulsory Retirement versus Biomedical Prolongation of Life."

Dr. Walter S. Coe of Louisville, Ky., and Dr. Elliot V. Newman of Nashville served as co-chairmen of the program committee.

### Grants to Medical Schools In Tennessee

The Department of Continuing Education of the University of Tennessee College of Medicine has received a \$20,000 grant under Title I—Higher Education Act. The grant will be used to offer continuing education courses to physicians, dentists, pharmacists, nurses and the ancillary health professions on a community level within the state and for a survey among the health professions as to continuing education needs. It will be administered through the Department of Continuing Education in cooperation with Vanderbilt, Meharry, University Hospital in Knoxville and the Medical Units.



A one-year federal grant of \$19,213 for cancer research has been awarded to a Meharry Medical College surgery resident. Dr. Charlotte Walker will be principal investigator of the project, sponsored by the National Cancer Institute of the Public Health

In fact, there's as much iron...250 mg. ...in a 5 cc. ampul of Imferon (iron dextran injection) as in a pint of whole blood. When iron deficient patients are intolerant of oral iron...or orally administered iron proves ineffective or impractical...or if the patient cannot be relied upon to take oral iron as prescribed, Imferon (iron dextran injection) dependably increases hemoglobin and rapidly replenishes iron reserves.

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**IN BRIEF: ACTION AND USES:** A single dose of Imferon (iron dextran injection) will measurably begin to raise hemoglobin and a complete course of therapy will effectively rebuild iron reserves. The drug is indicated only for specifically diagnosed cases of iron deficiency anemia and then only when oral administration of iron is ineffective or impractical. Such iron deficiency may include: patients in the last trimester of pregnancy; patients with gastrointestinal disease or those recovering from gastrointestinal surgery; patients with chronic bleeding with continual and extensive iron losses not rapidly replenishable with oral iron; patients intolerant of blood transfusion as a source of iron; infants with hypochromic anemia; patients who cannot be relied upon to take oral iron.

**COMPOSITION:** Imferon (iron dextran injection) is a well-tolerated solution of iron dextran complex providing an equivalent of 50 mg. in each cc. The solution contains 0.9% sodium chloride and has a pH of 5.2-6.0. The 10 cc. vial contains 0.5% phenol as a preservative.

**ADMINISTRATION AND DOSAGE:** Dosage, based upon body weight and Gm. Hb/100 cc. of blood, ranges from 0.5 cc. in infants to 5.0 cc. in adults, daily, every other day, or weekly. Initial test doses are advisable. The total iron requirement for the individual patient is readily obtainable from the dosage chart in the package insert. Deep intramuscular injection in the upper outer quadrant of the buttock, using a Z-track technique, (with displacement of the skin laterally prior to injection), insures absorption and will help avoid staining of the skin. A 2-inch needle is recommended for the adult of average size.

**SIDE EFFECTS:** Local and systemic side effects are few. Staining of the skin may occur. Excessive dosage, beyond the calculated need, may cause hemosiderosis. Although allergic or anaphylatoxoid reactions are not common, occasional severe reactions have been observed, including three fatal reactions which may have been due to Imferon (iron dextran injection). Urticaria, arthralgia, lymphadenopathy, nausea, headache and fever have occasionally been reported.

**PRECAUTIONS:** If sensitivity to test doses is manifested, the drug should not be given. Imferon (iron dextran injection) must be administered by deep intramuscular injection only. Inject only in the upper outer quadrant of the buttock, not in the arm or other exposed area.

**CONTRAINDICATIONS:** Imferon (iron dextran injection) is contraindicated in patients sensitive to iron dextran complex. Since its use is intended for the treatment of iron deficiency anemia only it is contraindicated in other anemias.

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Service. The grant will enable Dr. Walker to continue research begun in 1953 by Dr. Horace Goldie on the spreading of tumors in mice.



Two public health service grants, totaling \$86,643 have been awarded Vanderbilt University for research. A \$61,000 grant to Dr. Randolph Batson, Dean of the School of Medicine, is for a radio-biology research facility. Dr. Robert Quinn of the Preventative Medicine Department received \$25,643 for a three-year research project on "the main significance of non-typeable group of streptococci."

### National Foundation Grants

The Birth Defects Center at Erlanger Hospital, Chattanooga, has received an annual budget request of \$16,755 from the National Foundation—March of Dimes and a special fund of \$14,500 for a new chromosomal laboratory from local foundations. The new laboratory, scheduled to open in October, will be staffed and equipped for research of the chromosomes and genetics of the children and parents served by the Birth Defects Center. The facility will also be available to area doctors and patients.

The National Foundation has also announced five other research and treatment grants for Tennessee institutions including the largest sum of \$106,637 to Vanderbilt University Hospital for continuing research with defects.

The others include \$17,500 to University of Tennessee Memorial Research Center and Hospital in Knoxville, \$5,500 to the UT Hospital in Knoxville for patient care, \$28,000 to the evaluation center at the UT Hospital in Memphis and \$5,000 to the UT Hospital in Memphis for patient care.

### Southeastern Regional Center For Trophoblastic Neoplasms

The Department of Obstetrics and Gynecology, Duke University Medical Center, announces the establishment of the Southeastern Regional Center for Trophoblastic Neoplasms. This Center is sponsored by a Health Service Project Grant Award from the Department of Health, Education and

Welfare, Division of Chronic Diseases. This project in Cancer Control is established for the purpose of providing urinary gonadotropin assays and consultative assistance to physicians to aid in evaluation of patients who have or are suspected of having abnormalities in trophoblastic tissue growth. Beginning September 30, 1966, physicians desiring gonadotropin assays for patients with placental abnormalities as molar degeneration, hydatidiform mole, syncytial endometritis, chorio-adenoma destruens and choriocarcinoma may call or write the Center at Duke University Medical Center, Durham, North Carolina (Area Code 919, 684-8111).

### PERSONAL NEWS

**Dr. James J. Callaway**, assistant professor of medicine, Vanderbilt University School of Medicine, was guest clinician for a two-day course, presented September 29-30 at University Hospital at Knoxville. The course, under the direction of **Dr. Frank London**, professor of clinical medicine and director of the Cardiac Clinic, University Hospital, emphasized recent developments in diagnosis and treatment of common types of cardiac diseases seen in general practice. Also participating were **Dr. Daniel A. Brody**, professor of medicine, and **Dr. Gene H. Stollerman**, professor and chairman, Department of Medicine, University of Tennessee, Memphis.

**Dr. Thomas Minor**, Paris, was guest speaker at the institute for nurses, sponsored by the West Tennessee Heart Association on September 15th in Jackson.

**Dr. Robert S. Sanders**, former Murfreesboro pediatrician, has been appointed public health officer for Wilson, Smith, and DeKalb Counties.

**Dr. Donald B. Gibson** has announced the opening of his office for general practice at 1077 Graysville Road in the East Brainerd Center, Chattanooga.

**Dr. Bobby C. Higgs**, Jackson, spoke to the West Tennessee Medical Assistants at a meeting of the Society on September 13th. Dr. Higgs' subject was "Congenital Heart Defects."

**Dr. George A. Zirkle, Jr.**, Knoxville, has been elected president of the Tennessee Pediatric Society to succeed **Dr. Luther A. Beazley** of Donelson. Other officers named were **Dr. George Lovejoy** of Memphis, vice president, and **Dr. William B. Wadlington** of Nashville, secretary-treasurer.

**Dr. Charles David Kennedy** has become associated with **Dr. Carl A. Hartung** in Chattanooga. Dr. Kennedy is a specialist in internal medicine.

**Dr. James N. Etteldorf**, professor of pediatrics, University of Tennessee, participated in two re-

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**Precautions:** As with all effective diuretics, vigorous therapy may produce electrolyte depletion. Patients with severely reduced renal function should be observed carefully since thiazides may be contraindicated. Care should be taken with patients predisposed to diabetes or gout. Patients with a tendency to potassium deficiency, as in hepatic cirrhosis or diarrheal syndromes, or those under therapy with digitalis, ACTH, or certain adrenal steroids, also should be watched carefully.

**Side Effects:** Nausea, flushing, constipation, skin rash, muscle cramps and gastric discomfort have occasionally been noted; rarely thrombocytopenia and bone marrow depression, photosensitivity, cholestatic jaundice, pancreatitis, perimacular edema, gout and diabetes have been caused by the administration of thiazides.

**Contraindications:** Complete renal shutdown; rising azotemia or development of hyperkalemia or acidosis in severe renal disease; demonstrated hypersensitivity.

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cent out-of-state meetings. He presented two lectures at the invitation of the South Dakota Medical Association, one on salicylate intoxication and the other on use of antibiotics in pediatrics. The other, more recent appearance, was at Daytona Beach, where he spoke on two topics before the Florida State Bureau of Maternal and Child Health: "The Infant Born of the Diabetic Mother," and "The Nephrotic Syndrome in Childhood."

**Dr. James E. Shull**, Kingsport, is the new president of the Sullivan County Tuberculosis Association.

**Dr. Fred B. Looper**, native of Blanchester, Ohio and graduate of the University of Tennessee Medical School in 1961, is now associated with Jackson-Madison County General Hospital in the department of radiology.

"Professionalism through Personal Adjustment" was discussed by **Dr. Andrew S. Wachtel**, Oak Ridge, at a seminar for career secretaries, sponsored by the local chapter of the National Secretaries Association on September 10th.

## BOOK REVIEW

**CURRENT PERSPECTIVES IN CANCER THERAPY.** 222 pages. *Current Perspectives in Surgery.* By 32 Authors, Edited by William S. Blakemore, M.D., and I. S. Ravdin, M.D. Harper & Row, Hoeber Medical Division, New York 1966. Price \$8.50.

This monograph gives a bird's eye view of the current concepts of the etiology and mechanisms of tumor growth. The role of viruses, chemical environment, genetic influences, and irritative stimuli in initiation of tumor growth is summarized. Recent developments such as description of chromosomal abnormalities and the molecular basis of cancer chemotherapy actions are discussed.

One section of the book is devoted to a description of the current status of the clinical application of hormonal and chemotherapy. The various techniques of regional infusion chemotherapy are presented. Also combination chemotherapy and irradiation is described. Although the results are promising, no truly generally effective agent is available.

One section gives a summary of the current results obtainable in patients with carcinoma of the upper alimentary tract (oropharynx, esophagus, and stomach). Emphasis is placed on early diagnosis and radical excisional therapy.

Five chapters are devoted to colonic neoplasms. The relationship of carcinoma to pre-existing polyps and ulcerative colitis are documented. A final section is devoted to the clinical status of treatment of neoplasms in childhood, uterine adenocarcinoma, carcinoma of the breast, lung, and genitourinary tract.

## ANNOUNCEMENTS

### Calendar of Meetings, 1966-67

#### State

Feb. 15-17, 1967	Mid-South Postgraduate Medical Assembly, Sheraton Peabody Hotel, Memphis
April 13-15	Tennessee Medical Association Annual Meeting, Sheraton Peabody Hotel, Memphis
Dec. 5-7	Southern Surgical Association, The Homestead, Hot Springs, Va.
Jan. 20-21, 1967	American College of Surgeons, Arizona Chapter, Arizona Inn, Tucson
Feb. 13-16	Medical Society of the State of New York, Americana Hotel, New York City
Feb. 15-19	Atlanta Graduate Medical Assembly, Atlanta Marriott Motor Hotel, Atlanta
Feb. 23-25	Central Surgical Association, Pittsburgh-Hilton Hotel, Pittsburgh, Pa.
March 6-9	New Orleans Graduate Medical Assembly, Roosevelt Hotel, New Orleans
March 16-18	Southern Society of Anesthesiologists, Fort Sumter Hotel, Charleston, S. C.
March 20-23	Southeastern Surgical Congress, Americana Hotel, Bal Harbour, Florida
Nov. 27-30	National
Dec. 2-7	American Medical Association Clinical Meeting, Las Vegas, Nevada
Jan. 13-14, 1967	American Academy of Dermatology, Palmer House, Chicago
Jan. 14-19	American Society for Surgery of the Hand, Jack Tar Hotel, San Francisco
Jan. 23-25	American Academy of Orthopaedic Surgeons, Civic Auditorium, San Francisco
Feb. 15-19	Society of Thoracic Surgeons, Muehlbach Hotel, Kansas City, Mo.
Feb. 18-22	American College of Cardiology, Washington Hilton Hotel, Washington, D. C.
Feb. 26-March 4	American Academy of Allergy, Holiday Inn—Riviera, Palm Springs, Calif.
March 12-15	American Society of Clinical Pathologists, Dunes Hotel, Las Vegas
	International Academy of

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Pathology, Sheraton Park Hotel, Washington, D. C.  
 American College of Allergists, The Roosevelt, New Orleans

Jude Children's Research Hospital, Memphis, Tennessee. No registration fee. Further information is available through headquarters, Southwest Cancer Chemotherapy Study Group, 6723 Bertner Drive, Houston, Texas 77025.

### Chest Physicians Announce 1967 Alfred A. Richman Essay Contest

The American College of Chest Physicians offers three cash awards to be given annually for the best essay prepared by undergraduate medical students on any phase of the diagnosis and/or treatment of chest diseases. The first prize will be \$500; second prize, \$300 and third prize, \$200. Each winner will also receive a certificate of merit. A trophy inscribed with the name of the winner and the name of his school will be presented to the winner's school. Winners will be announced at the 33rd annual meeting of the American College of Chest Physicians, to be held in Atlantic City, New Jersey, June 15-19, 1967.

The official application form, sample copies of the journal and additional information may be secured by writing Mr. Murray Kornfeld, Executive Director, American College of Chest Physicians, 112 East Chestnut Street, Chicago, Illinois 60611, USA.

### Doctors' Day at St. Thomas Hospital

The attending staff of St. Thomas Hospital, Nashville, will sponsor Doctors' Day Nov. 26, featuring a short seminar on the cardiac arrest team. A buffet lunch will be served. For further information: Harry O'Donnell, Public Relations Director, St. Thomas Hospital, Telephone 244-5151, Extension 238.

### "Vincristine Symposium"

Current concepts of biological, pharmacological and biochemical action, and comprehensive summaries of therapeutic results obtained in treating solid tumors and the leukemias, will be presented at a Vincristine Symposium, sponsored by the Pediatric Division of the Southwest Cancer Chemotherapy Study Group, January 27, 1967, St.

### TMA Distinguished Service Awards

The Board of Trustees of TMA established three distinguished service awards to be made to physician members each year after receiving nominations from the membership of the Tennessee Medical Association, the awards to be presented at the annual meeting each April. Any member of the Tennessee Medical Association in good standing is eligible for nomination, and any member of TMA in good standing may nominate a recipient. The nominees should be selected for an outstanding service performed in the immediate preceding year.

Information regarding data to be filed with nominations may be obtained from the Secretary of your respective county medical society or the headquarters office of TMA.

### Greeting Cards Benefit Project HOPE

Greeting cards with the authentic spirit of hope are being offered for the Holiday Season by The People-to-People Health Foundation, Inc. Proceeds from the sale of the cards will benefit Project HOPE, sponsor of the hospital ship S. S. HOPE and shore-based medical clinics on three continents.

Project HOPE, organized six years ago, takes American medical know-how to the peoples of developing nations. The S. S. HOPE has made medical teaching-treatment missions to Indonesia, South Viet-Nam, Peru, Ecuador, Guinea, and Nicaragua, and in each country has left behind self-help clinics and programs which continue today. The S. S. HOPE is staffed by American physicians, dentists, nurses and technicians, many of whom serve without pay.

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T M A

## THE VIEWING BOX

The American Medical Association has announced plans for a program designed to bring about what was termed "a vast upgrading" of emergency medical care in the United States.

With hospital emergency room visits up 175 per cent in a ten year period, overall services and facilities "have fallen woefully behind," said Charles C. Edwards, M.D., director of the AMA's division of socio-economic activities.

"The dramatic increase in emergency cases has not been matched with dynamic efforts for a vast upgrading of services," Dr. Edwards declared.

"We know that emergency service can be excellent. This has been proven in many communities. But there is no uniformity. In other areas emergency service suffers from both lack of coordination and lack of understanding about what constitutes good care.

"A soldier wounded in the jungle of Vietnam often gets quicker, more comprehensive emergency care than an accident victim on the open highway or a farmer stricken by a heart attack."

Acting on a recommendation of its Board of Trustees, the AMA has called together a panel of experts to help organize a national conference next spring that will study and recommend means for improving emergency medical care.

One of the principal tasks of the conference, said Dr. Edwards, will be to unify work already underway by such groups as the American College of Surgeon's trauma committee and the AMA's Council on Rural Health, department of health education and department of hospitals and medical facilities.

Members of the panel invited to meet Oct. 19 at AMA headquarters, included:

Samuel F. Seeley, M.D., and John M. Howard, M.D., of the National Academy of Science; R. R. Hannas, Jr., M.D., of the American Academy of General Practice; Robert H. Kennedy, M.D., and Oscar P. Hampton, Jr., M.D., of the American College of Surgeons; Joseph H. Gerber, M.D., and Joseph K. Owen, Ph.D., of the Division

of Accident Prevention, U. S. Public Health Service; James B. Hartgering, M.D., of the American Hospital Association; Fred C. Dauterich, Jr., of the American College of Physicians; J. E. Brown of the White House Office of Emergency Planning, and George M. Wheatley of the National Safety Council. Also invited were representatives from the American Academy of Pediatrics.

As envisioned by Dr. Edwards, the conference will delve into four principal areas:

- Ambulance service and the training of ambulance personnel.
- The operation, staffing and equipping of hospital emergency facilities.
- Improved medical education in emergency procedures.
- Further research into the causes and prevention of medical emergencies, whether the result of accident or disease.

"We are faced not with a single problem but with a complexity of problems," Dr. Edwards said.

"These add up to the fact that nationwide too many emergency patients are dying from want of fast and appropriate action—either because their would-be rescuers are inept or because care facilities are inadequate."

Most efforts to improve such conditions have run up against lack of incentive or lack of financing, Dr. Edwards noted.

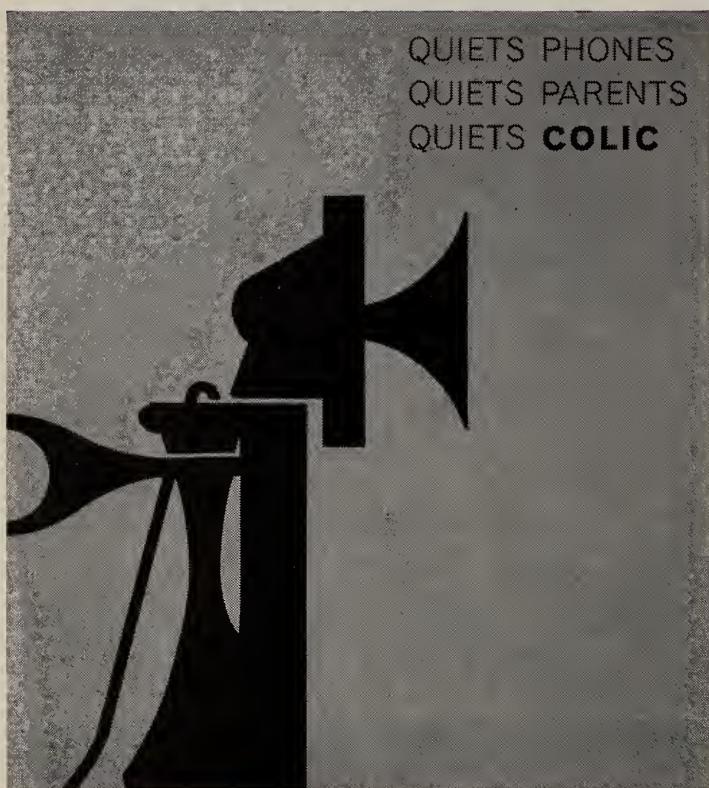
"This means that in a sense emergency service has been relegated by default to a sidelight instead of a vital function in overall medical care.

"At present we don't even know how many ambulances there are in the nation, let alone how many lives might be saved each year among hundreds of thousands of trauma patients if emergency care were better.

"In any event, it is time we found out what is possible through improved facilities and improved understanding of the nature of medical emergencies.

"We hope that the AMA conference on emergency medical care will help initiate such improvements by stimulating ap-

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propriate medical organizations, communities and government at all levels into concerted action."

The price tag for such a program would undoubtedly be considerable, he conceded. "Emergency service is costly. But on the other hand, it is not nearly as costly as the high price of death in terms of both actual and economic loss.

"For example, the price of a young man's death in an accident—if you can put a price on life—goes beyond funeral expenses. There is a loss of productivity that when multiplied by tens of thousands of such deaths each year gnaws at the strength of the nation. There is a loss of income to his family, which in many instances has to be partially made up by public funds in terms of aid and assistance. And, there is a loss of opportunity for the man's children, if, for instance, his death means they can't go to college."

An analysis of "our less than adequate" state of emergency care by Richard F. Manegold, M.D., director of the AMA's department of hospitals and medical facilities, indicates that much of it may spring from a "fragmented haphazard approach."

"Because a man has a driver's license doesn't mean he is competent to drive an ambulance," Dr. Manegold said. "After all he's not delivering goods, like a laundry man, but sick and injured people.

"Often he has vital decisions to make. Should a patient with a broken back be moved, or should more qualified help be sought? Is mouth-to-mouth respiration needed? Is the patient in shock? Can bleeding be controlled?

"Unless ambulance drivers understand such things, a life that could be saved might slip away. And yet many ambulance drivers don't even know the rudiments of first aid.

"What is obviously necessary is a program to develop personnel for civilian use similar to army medical corpsmen. They would either accompany ambulances or serve as ambulance drivers."

Along with trained technicians for ambulances, Dr. Manegold also suggested more elaborate equipment.

"We can now monitor heart beat, blood pressure and respiration of astronauts in

space. It seems to me that similar facilities for ambulances could provide information on a patient's condition before he even gets to the hospital. Another important piece of equipment might be a cardiac pacemaker similar to those now in use in intensive care units of hospitals."

Turning to the subject of hospital emergency departments, Dr. Manegold said, one of the greatest needs was for "coordination of services."

"Emergency rooms must be geared to community requirements, rather than based on some nebulous factor such as hospital size," he said.

In this context it is neither necessary nor desirable that all hospitals have the same type emergency facilities. If a particular hospital is well equipped to handle accident emergencies, it might then be better if the hospital across the street organized its emergency department to handle cardiac emergencies, he explained.

"With a little coordination we can see to it that one area isn't overloaded with a particular type of emergency facility while another area does without.

"This is not always the case today," he said. "For example, cardiac surgery rooms became a sort of status symbol for hospitals. Some went to great expense setting up such facilities and staffing them with highly-skilled teams only to find that they didn't receive enough cases for surgery to make it worthwhile keeping the team together."

Smaller communities in particular sometimes have special needs in regard to emergency facilities. "We get some indication of this from the fact that 70 per cent of all auto accident deaths occur in communities of 2,500 or less. In part the higher death rate may be due to the fact that distances are so much greater. But lack of staff and equipment in many small hospitals is also a factor, I think."

The problem is that the size of the emergency department is usually based on the size of the hospital when in fact no such correlation can be made. "Because a community may need only a 25-bed hospital doesn't mean that a first aid room can serve as an emergency department," he said. "Other factors have to be taken into consid-

eration—the proximity of a major highway, for instance."

In addition to all this, there is also the situation created by what Dr. Manegold referred to as "the use of emergency facilities as an after hours doctor's office."

"People with chronic complaints or with nothing more pressing than an ingrown toenail can be found in almost every emergency room. This is fine if a hospital can handle such complaints. But in many instances such non-emergencies may so overload emergency facilities that when the trauma patient arrives the institution can't respond with adequate care."

Of course facilities alone are not enough without physicians to staff them. Inadequate staff—or what amounts to almost the same thing, inadequate scheduling of staff—can be just as deleterious to good emergency care as an overtaxed emergency room or an ambulance driver who doesn't know

how to apply a tourniquet, Dr. Manegold said.

Moreover, he believes that all physicians must be competent in emergency techniques, yet some enter into the practice of medicine without ever having worked in an emergency room.

"This is wrong," he said. "No intern should leave training without experience in emergency care. At the same time we must provide the wherewithall for continuing education so the practicing physician can learn new emergency techniques as they are developed."

"We have in the nation today bits and pieces of exemplary emergency care," he added. "Our objective now is to see that this same degree of care is provided in all communities."

(AMA News Release)

Sept. 23, 1966

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These principles are intended to aid physicians individually and collectively in maintaining a high level of ethical conduct. They are not laws but standards by which a physician may determine the propriety of his conduct in his relationship with patients, with colleagues, with members of allied professions, and with the public.

**Section 1.**—The principal objective of the medical profession is to render service to humanity with full respect for the dignity of man. Physicians should merit the confidence of patients entrusted to their care, rendering to each a full measure of service and devotion.

**Section 2.**—Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments.

**Section 3.**—A physician should practice a method of healing founded on a scientific basis; and he should not voluntarily associate professionally with anyone who violates this principle.

**Section 4.**—The medical profession should safeguard the public and itself against physicians deficient in moral character or professional competence. Physicians should observe all laws, uphold the dignity and honor of the profession and accept its self-imposed disciplines. They should expose, without hesitation, illegal or unethical conduct of fellow members of the profession.

**Section 5.**—A physician may choose whom he will serve. In an emergency, however, he should render service to the best of his ability. Having undertaken the care of a patient, he may not neglect him; and unless he has been discharged he may discontinue his services only after giving adequate notice. He should not solicit patients.

**Section 6.**—A physician should not dispose of his services under terms or conditions which tend to interfere with or impair the free and complete exercise of his medical judgment and skill or tend to cause a deterioration of the quality of medical care.

**Section 7.**—In the practice of medicine a physician should limit the source of his professional income to medical services actually rendered by him, or under his supervision to his patients. His fee should be commensurate with the services rendered and the patient's ability to pay. He should neither pay nor receive a commission for referral of patients. Drugs, remedies or appliances may be dispensed or supplied by the physician provided it is in the best interests of the patient.

**Section 8.**—A physician should seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby.

**Section 9.**—A physician may not reveal the confidences entrusted to him in the course of medical attendance, or the deficiencies he may observe in the character of patients, unless he is required to do so by law or unless it becomes necessary in order to protect the welfare of the individual or of the community.

**Section 10.**—The honored ideals of the medical profession imply that the responsibilities of the physician extend not only to the individual, but also to society where these responsibilities deserve his interest and participation in activities which have the purpose of improving both the health and the well-being of the individual and the community.

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# The Journal of the TENNESSEE MEDICAL ASSOCIATION

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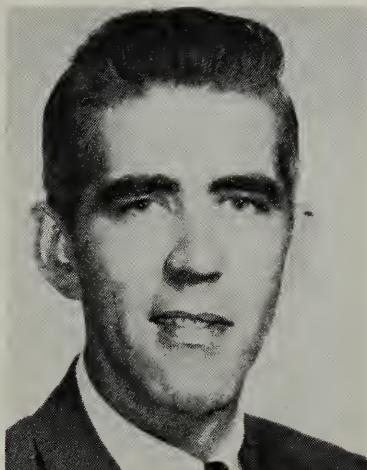
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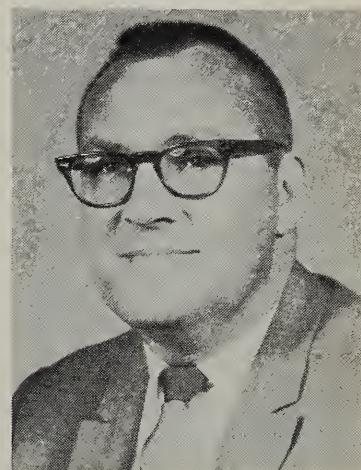
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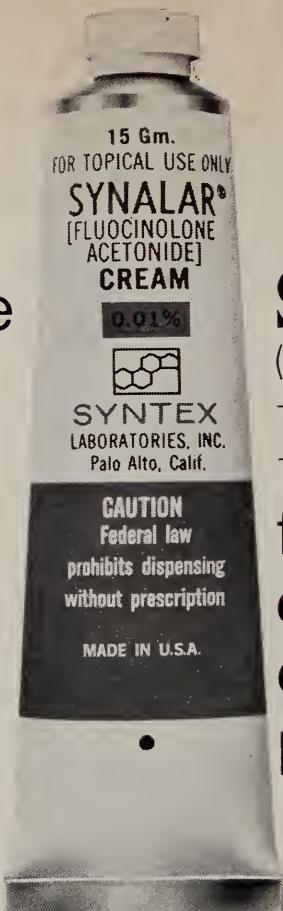


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# Journal of the Tennessee Medical Association

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The speaker reviewed the questions and problems which were posed in anticipation of the implementation of Medicare, and some trends which are appearing in the early months following its establishment. Actually, of even greater interest is Title XIX and the implications of its implementation, and the need of state legislatures to seek the advice of the medical profession in a sensible solution for this statute.

## An Early Look (or Review) of Medicare\*

JAMES Z. APPEL, M.D.† Lancaster, Pa.

During the last two or three months of my tour of duty as President of the American Medical Association, the predominant questions asked by news reporters, freelance writers, columnists and others of the fourth estate were these:

What did I think would be the effects of the beginning of Medicare?

Would hospitals be overcrowded?

Would doctors be swamped with aged patients?

Would doctors refuse to serve the aged?

How many physicians would confine their billing of patients to the direct method, and how many would accept assignment?

How many doctors would refuse to certify and re-certify need for hospitalization?

How likely would physicians be to raise their fees?

Would hospital-based specialists walk out?

To me, all of these questions were poppycock. The answers had to be guesses. Nobody knew and nobody could know what would happen in the future.

It reminded me of newly pregnant young wives asking me to prognosticate the sex of the baby. I always tried to find out what the prospective mother preferred, and then predicted the opposite. If I were wrong, the mother got what she wanted and happily teased me about my error. If I were right, there was some disappointment on the part of the mother, but I was considered one smart doctor.

\*Presented at the meeting of the Tennessee Valley Medical Assembly, September 26-27, 1966, Chattanooga, Tenn.

†Past-president, American Medical Association.

Let us look at some of those questions, briefly.

Would hospitals be over-crowded? If the proponents of medicare were correct, the answer could only be "Yes." If the medical profession was right, the answer could only be "No."

Why? The proponents of medicare maintained there was a deplorable number of aged being deprived of medical care because of inability to pay for it. On this assumption one could only conclude that they would rush for treatment once it became relatively free.

The medical profession maintained that high quality medical care was available to all and the aged were receiving it as well as others, in spite of the cost. Thus, excepting overutilization, there should be no rush.

Who was right? Was there an avalanche of demand for hospitalization by the "neglected and impoverished aged"? You answer the question.

There was a 3 to 5% increase in bed occupancy, up from a normal of a 25 to 30% average to 30 to 35 per cent.

Would doctors' offices be swamped by the aged? What are the figures? Have doctors complained? The contradictory assumptions stated earlier in regard to hospitalization apply here. Again, you answer the questions.

Would doctors refuse to give service under medicare to their aged patients? I have heard no complaint on this score. Have you? The only doctors I know who have openly opposed giving such service have been the pediatricians. I understand there might be some rebellion in their ranks as to

whether to limit their practice to the calendar age of the patient, or the mental age. I know I've been told I ought to see a pediatrician!

Would doctors confine billing to the direct method and refuse to accept assignment? First reports from one of the most conservative areas of the country indicate selective use of both systems, depending on the patient's financial resources. This is hardly a boycott of assignment.

Payments for hospitalization are running far ahead of payments for medical services, primarily because of earlier billing and quicker satisfaction of deductibles. Thus we get a more valid picture of the utilization of Part A of the law. Yet there has been no comment that payment to hospitals has been refused because of failure by physicians to certify or re-certify need for hospitalization.

Have physicians' charges increased? Certainly the cost of health care has gone up during the first six months of 1966. The government reports that the cost of medical services is up 3.4 per cent.

Not all of the public has become aware that the category "Cost of Medical Services" includes several components—such as hospital costs, medical or physicians' charges, and drug and appliance costs. It is unfortunate that government persists in classifying them all as medical costs. As a result, and as of this moment, we are not sure which aspects are responsible for the increase in the cost index.

Heretofore, the rapidly increasing cost of hospitalization has been the major factor in determining the index. It might be in this instance, too. Higher salaries for all hospital personnel, especially nurses, certainly must be reflected in higher hospital costs.

The application of a new and more realistic cost-accounting system, as required by medicare, likewise will increase cost to the in-patient and decrease it for the out-patient who has been subsidizing in-patients because of inflated diagnostic and laboratory prices necessary to off-set unrealistic prices for beds, rooms, etc.

Costs of physicians' services will also appear higher as a result of medicare, because physicians who have been reducing rates

for their medically indigent patients can now bill them at the regular rate.

The government has taken over financing of older people's medical costs, and has publicly proclaimed that second-class fees generate second-class service. The medical profession does not believe this latter premise, but we certainly believe that we should get full pay for our services if such does not work a financial hardship on the patient. There is now no further need for the physician to subsidize certain of his aged patients, so there well might be an increase in physician fees for services to the elderly as a group. But the application of the increase to the limited number of patient-beneficiaries of medicare should not exert great effect on the index of national physician charges.

The pharmaceutical industry disclaims any increase in the cost of drugs. In fact, it predicts the cost of drugs will drop.

These are only conjectures, but no one can deny that spiralling inflation will be a big factor in whatever happens. Not only the inflation of today, but the probably continuing inflation of tomorrow because of the failure of any agency—governmental, private, industrial or labor—to indicate any sincere desire to control it.

Providers of health services must look into the future expecting still greater inflation. This is particularly true when they are confronted with a pricing mechanism for their services based on reasonable and prevailing costs and charges as determined by a third or fourth party. This system provides no clear-cut way to adjust costs either for inflationary or deflationary defense.

It is, of course, too early to give responsible answers to any of these questions. My concern regarding them was not so much the answers, as the questions themselves. Since the answers are purely conjectural, they are not worth much. At the same time, the questions indicate to me that the questioners are overlooking some potentially serious problems confronting our nation.

It was surprising that almost no interest was shown in what could be a much bigger problem. I am referring to Title XIX of Public Law 89-97—the extensions of the Kerr-Mills law. I have been speaking

about this subject for some time, but I have usually had to sneak it in under a different subject for lack of interest.

It took action by the New York state legislature to call attention to the pitfalls in this piece of legislation. They had apparently been overlooked by the public, by the medical profession and even by those who created the law.

The American Medical Association supported this Title of PL 89-97. It satisfies several principles long held by the AMA in regard to the role of government in financing health care.

It is applicable only to the needy or near-needy. It is administered at the state level. It receives much of its money from the general treasury. Thus it is largely financed through progressive personal and corporate income taxes, rather than through a regressive tax system such as social security which puts the greatest burden on the less wealthy.

Title XIX, unlike Title XVIII, reaches its ultimate coverage by evolutionary stages over a nine-year period. The schedule permits states, facilities and personnel to adjust themselves to the jobs they will have to perform.

Fear has been expressed that medicare's Title XVIII is the first step toward a national health system which will eventually erase the age factor and cover all people for all health care, at the same time rigidly controlling all members of the health services industry.

Yet the benefits of Title XIX are much more extensive than those of Title XVIII. In fact, they just about cover the full gamut of conceivable health needs, with no deductibles and no co-insurance.

The only real obstacles to Title XIX becoming a comprehensive national health service are that the eligibility is determined by personal income and that part of the costs must be carried by the individual states.

Congress, however, could very quickly change the latter by changing federal-state grant ratios. As to the former, any politically-motivated and economically-innocent state legislature can make a shambles of realistic measurement of medical indigency. One state has already done so.

To some extent the federal government has played pretty fair in the implementation of Title XIX. The regulations for it have been general, leaving it up to the states to work out specifics. This coincided with the AMA philosophy that health needs of the people can best be determined at a local level.

Administration, specific benefits, determination of costs, methods of providing services and criteria of need are all determined by the state government.

Have state governments proved responsible? From our point of view, most have. Some have not.

The premise of our support of Title XIX was based largely on state administration. Why? It has been our feeling that the closer we get to home, the better we know our problems.

But do we?

Well, we physicians know the cost of living. We know the where-withall of our patients. We recognize the less fortunate in our local society.

But do we accept continuing responsibility for them? Or do we engross ourselves in our day-by-day calls and forget the local social problems that confront us and plead for attention? Now that Congress has passed a law that purports to correct the problems, do we decide we have no further individual obligations?

History compels me to answer these questions in the affirmative. And the history that is my authority was compiled by state performance under the Kerr-Mills law.

Kerr-Mills enjoyed effective implementation in some states. It was woefully inefficient in others. It was overly efficient in at least one state.

The American Medical Association had believed that state administration would result in more efficient and more effective implementation of any health service. It had also believed state administrations would respond more to the advice of the state's medical profession and guidance. The failure of Kerr-Mills, where it failed, can be laid at the feet of irresponsible state government or ineffective guidance by the medical profession. In many instances probably both were involved.

Was the AMA naive in thinking that

with the extensions of Kerr-Mills, these two situations would correct themselves? I hesitate to say either "Yes" or "No."

By and large, state legislatures responding to Title XIX have demonstrated responsibility. And in those states, I am sure, the state societies have played an effective role as consultant. But some legislatures have played the "give-away game," either in spite of, or without advice by the state medical society.

In one state income limits have been unrealistic, at least from a statewide viewpoint. The extent of coverage at the onset of implementation has been so wide that it is questionable whether the health professions have personnel or facilities to provide them. And just as the proponents of all governmental programs to finance health services have repeatedly underestimated costs, so at the state level legislators have grossly underestimated the cost. Congress apparently gave little consideration to the cost factor of Title XIX. In a way, it permitted state legislatures to determine the amounts of federal money to be spent in the state. The state legislatures were not daunted by the state and county share of costs.

As long as the state restricts the types of benefits to those required by the federal law, the Department of Health Education and Welfare is obligated to grant the state the percentage determined by the law. This is the only example I know in which Washington has given a state authority to write federal checks.

State legislatures were not limited to any maximal income for people who would be eligible. There were minimal limits in that the program must cover already established income categories receiving cash grants. But the upward limit was left to the judgment of the state.

Using a single income figure as a criterion of need can become unrealistic in states that have high-cost-of-living metropolitan areas as well as low-income rural areas. But the federal law provided that income limits must be uniform throughout the state. So perhaps we should not be too harsh on New York, which originally set eligible income levels so high that some es-

timated 44% of the state's population would be covered.

States with large, expensive systems of state hospitals, primarily to serve the indigent, do not wish to see these hospitals depleted of patients. Thus, there is the danger of including provisions that would deny free choice of physician. It put real fear in the hearts of New York physicians when the Commissioner of Welfare reportedly made just such a threat—primarily as a way to control costs.

If the medical profession continues to believe that health care financing can be done better at the state level than at the federal, state medical societies must exercise strong and effective influence on their state legislatures to adopt responsible enabling legislation and thus insure that the "open endedness" of Title XIX is not closed by congressional amendments. It has been reported that some congressmen advocate placing a dollar limit on the matching grant to each state. Also, that the federal government should set maximal limits on income eligibility.

While there seems to be no move as yet to limit fees paid for physicians' services, we do know that some members of Congress have called for an investigation of the so-called "liberality" of the Department of Health Education and Welfare in defining "reasonable costs and charges."

Thus, it behooves each state medical society to prevail upon its state legislature to establish reasonable limits to income eligibility. There can be no deductibles to welfare cash beneficiaries. Those who do not receive cash welfare benefits, however, are subject to deductibles. The income limit for these two groups must be carefully and realistically drawn.

I would refer you to Report D of the Council on Medical Service, adopted by the AMA House of Delegates in June. This report pointed out that medical indigency does not depend on income alone, but also on the effect of medical expenses on the family's income.

State Medical societies should insist that the enabling acts guarantee free choice of physician and hospital to all beneficiaries of the program. And since the law requires that physicians and hospitals accept as full

payment the amounts designated by the state, efforts should be made to insure that the fee schedule is in keeping with the usual, customary and reasonable concept for charges of physicians and costs of hospitalization. Enabling acts should provide for state advisory committees to the state administrative agency, and such committees should have a reasonable proportion of physicians as members.

These are just a few of the pitfalls to which state medical societies should be alert. For guidance and further information, I would suggest close contact with the Title XIX Information Center in the Department of Governmental Programs of the AMA.

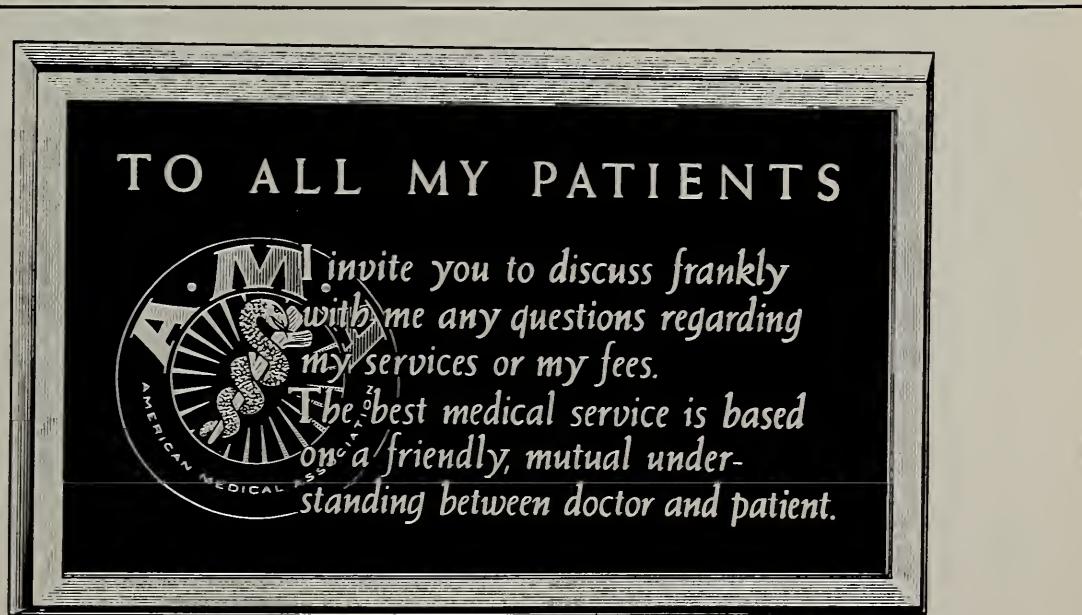
In conclusion, I would only state that the concept of Title XIX is laudable—a program extending the helping hand of government to those among our citizens who need assistance in financing necessary medical care. The determination of need is left to the states, as it should be, and so is administrative control over the program.

Title XIX provides the states with a mechanism, in cooperation with the federal government, by which the burdens of financing needed medical care can be eased for the less fortunate of our citizens.

But whether it proves to be a blessing or a calamity will depend on the wisdom of the members of the 50 state legislatures which are charged with the responsibility of enacting legislation to implement this program, and the activity of the state medical societies in advising their respective legislators. Its success and effectiveness will also depend on the judgment of those who administer the state programs.

One of the virtues of Title XIX is that hasty and unwise decisions in one or two states can be limited to those states and need not be spread throughout the nation. A program totally controlled and administered in Washington could become a swift national disaster as a consequence of hasty and ill-considered decisions. Administrative control and determination of need on a state-by-state basis offers a safeguard against such an eventuality.

\* \* \*



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## CASE REPORT

### Anemia Associated with Laundry Starch Eating\*

Bruce B. Bellomy, M.D. and Thomas McC. Chesney, Knoxville, Tenn.

The habitual eating of corn starch, primarily by negro women and often in relatively large quantities, is a common practice in certain areas of the United States. This report describes the complication of anemia occurring in a young negro woman whose diet, over a prolonged period, included large quantities of laundry corn starch. This peculiar dietary habit is seemingly far more common than is generally realized by most physicians, and needs to be considered in the evaluation of anemia.

#### Case Report

A 20 year old unmarried, nulliparous negro woman entered the hospital on July 20, 1966 for a tonsillectomy. Except for the occasional occurrence of bouts of tonsillitis, her general health was considered to be good. Menarche was at age 13 and menses were described as regular, not excessive in amount, and lasting 3 days. There was no history of unusual blood loss.

On physical examination the patient was a normally developed, well nourished appearing young woman in apparent good health. The vital signs were all within normal limits. The tonsils and adenoids were greatly enlarged; no other abnormalities were noted.

The initial laboratory data revealed a Hgb. of 8.5 Gm., and a PCV. of 29%. The WBC. count was 3800 with 42% neutrophils, 51% lymphocytes, and 7% eosinophils. Microscopic examination of the peripheral blood smear revealed hypochromic microcytic erythrocytes in the absence of other abnormalities. Routine urinalysis and serologic test for syphilis were both negative.

Further laboratory studies included: a BUN. of 7.8 mg., serum bilirubin of 0.4 mg., total serum protein level 7.0 Gm., with albumin 3.2 and globulin 3.8 Gm. per 100 ml. Sickle cell preparations were negative and hemoglobin electrophoresis revealed no abnormalities, including a normal hemoglobin A2 level. Multiple stool examinations were negative for ova and parasites, though guiac tests for blood were 2+ on two occasions and 1+ on one occasion.

Radiologic examination of the upper and lower gastrointestinal tract for possible source of blood loss was entirely negative.

\*From the Department of Pathology, Fort Sanders Presbyterian Hospital, Knoxville, Tenn. (Mr. Chesney is a third year medical student at Vanderbilt University School of Medicine.)

Because of the moderately severe anemia tonsillectomy was deferred.

An initial dietary history indicated an apparently adequate diet. Further and more detailed probing, however, brought to light the fact that the patient had been eating a one pound box of laundry starch (Argo brand) daily for several years. This was eaten both between meals and often as a major item in her regular meals. Treatment consisted of iron orally and the advice to discontinue the eating of starch.

Hematologic studies after 8 weeks of therapy with ferrous sulfate (0.6 Gm. per day) and complete abstinence from eating corn starch revealed a Hgb. level of 12.9 Gm., and PCV. of 40%, with a normal platelet and WBC. count and differential picture.

#### Comments

Precise figures as to the incidence of habitual eating of corn starch are not widely available though the practice is probably common. Ferguson and Keaton<sup>1</sup> found that 41% of a large group of negro women in Mississippi were starch eaters, and 27% of the group ate clay as well. The amount of starch eaten varied from only a few mouthfulls per day up to as much as one and a half pounds. In the obstetric clinic at Ohio State University Hospital, Silverman<sup>2</sup> found that 25.5% of 172 consecutive patients had eaten corn starch at some time; of the starch eaters 88.6% were Negroes. The form of starch eaten by the patient described here, as well as in all of the cases which we have seen described, has been Argo corn starch (manufactured by Corn Products Company) which is marketed in a dry form in lumps having a granular consistency. Sage<sup>3</sup> has calculated that a pound of corn starch contains 86% carbohydrates, 14% water and yields 1590 calories. Being essentially iron-free, an habitual diet rich in corn starch will be conducive to iron deficiency and obesity. The pathogenesis of the anemia is related to long term menstrual and/or obstetric blood loss in combination with chronic dietary insufficiency in iron.

Other significant complications of the long term eating of corn starch have been described, including bilateral enlargement of the parotid gland and formation of gastric bezoars. In the case reported by Silverman<sup>2</sup> there was diffuse swelling involving both parotid glands occurring in a 29 year old negro woman who had eaten one-half pound of Argo starch daily for a num-

ber of years. Histologic examination of the tissue of the parotid gland revealed changes which suggested the presence of a work hypertrophy secondary to prolonged ingestion of starch. Formation of bezoar is apparently a rare complication in the starch eater. The case of Allan and Woodruff<sup>4</sup> is the only description of such a complication in the recent literature and involved an 18 year old girl who developed gastric obstruction because of a starch gastrolith. She had been eating 3 or 4 boxes of corn starch daily over a one year period.

An attempt to explain or understand the habit of eating starch probably requires a further look into peculiar dietary habits seen in southern Negroes in years past. The practice of clay eating is much older and has been recognized since at least 1811, and to this day is practiced to some extent.<sup>5</sup> The origins of the habit of clay eating may be traced back to the days of southern slavery, and explanations have been advanced for the practice such as a deliberate desire to induce illness, the use to relieve hunger pains, and the pleasures of chewing have been put forth. White, kaolin-like clays are preferred for this use, having a somewhat tart or "puckerish" flavor. The practice of eating clay, once established, often

becomes a craving which borders on habituation and a ready source of the desired clay may become a carefully guarded secret. The eating of corn starch, it may be postulated, serves as a substitute for clay which in an urban environment, or for other reasons, may not be readily available. At any rate the practice is apparently relatively common, and once begun, seemingly, tends to be continued over long periods, at least by some individuals.

#### Summary

A case of moderately severe hypochromic microcytic anemia is described, occurring in a young negro woman who had eaten large quantities of corn starch over a prolonged period. It is suggested that this dietary practice among negro women is relatively common and needs to be considered in the evaluation of anemia.

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\* \* \*

## Tennessee Medical Association

### 132nd Annual Meeting

April 13, 14, 15, 1967

Sheraton-Peabody Hotel, Memphis

This review should be read with thought, especially by him who has entered practice more recently. One reason for breaches in consulting etiquette in practice is the freedom with which most patients on a service are seen by the house staff in training in an atmosphere of collective responsibility which is essentially impossible in private practice. It takes some time to learn that the Golden Rule is essential to consultations. Without a doubt it is the patient who suffers in the long run by breaks in the established customs of consultation.

## Regarding The Referral\*

JOHN H. BURKHART, M.D., Knoxville, Tenn.

In the beginning I need to establish one point for clarification, then I must establish a basic premise, and follow this with a very tacit admission. The point that must be clarified is that the statements and opinions in this presentation are from the viewpoint of one family physician. The premise is that we are not concerned with the question that has occupied too much of our time already,—the useless and unbecoming dissension within the profession and beneath its dignity, as to who can render the best patient care, the general practitioner or the specialist. The admission I must make is probably quite obvious and unnecessary, namely, that as one who has been engaged in the practice of medicine a little less than two decades, I am not qualified to talk about "the good old days" or by experience to support a comparison of how things were then and are now in the relationship of the consulter and the consultant. Rather I must base what I think and say about this relationship upon how I see it now as compared to what I believe it has been in medicine's more recent past. What I am saying is that it would appear that over the years there has been a deterioration or breaking down of some of the more elementary principles in the phase of medical practice known as *the referral*, to the end that some of its value has been diminished, and that it is the patient who is most often caught in the middle. Whether or not this is true, it is on this surmise that I attempt to justify the remarks which I shall make this evening.

From the earliest days of medicine until now it has been an accepted fact that no one physician, no matter how intelligent, well trained, or experienced, could know all there was to know about diagnosis, treat-

ment, or the vast accumulation of medical data. Thus, in many cases, if the signs and symptoms did not point to a clear cut diagnosis and in which the accepted treatment was more or less standardized, two heads might be better than one and many times three or four might be better than two. The honest, sincere, and humble physician, therefore, does not hesitate to seek the opinion and advice of his peers to the end that the patient's chances for evaluation and successful therapy will be enhanced. There have always been certain rules of this game, and until the modern era of medicine brought with it such a vast amount of specialization and subspecialization, along with the preoccupation of the lay press with medical matters and the public's frantic quest for the ultimate in medical care, these rules were rather rigidly followed. If they were not, the physician who did not follow them was branded as unethical and read out of the inner circle of ethical medical practice. Today these rules and principles are not followed as rigidly. It is my opinion, which may or may not be shared by other members of the profession, both generalists and specialists, that the art and value of the consultation have been compromised by the pressures of time, volume, and expedience, and in this situation both the profession and the patient have been the loser.

Now I would not wish you to believe that I think this is a matter of earth-shaking or profound significance, or that the progress and promise of medicine have been unalterably affected or delayed, or that the patient has been deprived or denied of what is best for him simply because we have, as members of the profession, permitted here and there a breech of the established ground rules in the matter of consultation. Most physicians can and do swallow their pride,

\*Read at the meeting of the Knoxville Academy of Medicine, Nov. 8, 1966.

shrug off slights, and ignore insults, if doing so seems to them to be in the best interest of their patient. But the fact of the matter is, it seems to me, that the interest of the patient might be served even better if it were not necessary to do any of these things if more attention were given to the basic principles involved in the consultation and the referral. Actually, there are only two basic principles, common courtesy and the Golden Rule. And so for the sake of brevity and to avoid belaboring the subject any longer, I would simply like to list a few ways in which these two fundamental precepts can and should be followed in the procedure of consultation and referral from the standpoint of both the consulter and the consultant, and what each has a right to expect from the other, bearing in mind that the whole procedure has only one basic motive which is to arrive at what is wrong with the patient under consideration and what can best be done about it.

First, I think it essential to recognize that the physician whom the patient sees first, however he got there, is the one in charge, unless this responsibility is delegated by mutual consent. This means that when the original physician, with the understanding and consent of the patient, sends him to another physician for advice and opinion, this and this alone is what he should receive. It is incumbent upon the referring physician to clearly state to the consultant what is requested, along with the essential facts of the case that have already been established, how it has been handled up to that point, what conclusions have been reached, and to whom the consultant is expected to report. There was a time when all consultations involved the consultant seeing the patient only in the presence of the referring physician, conferring with him at the bedside or privately nearby, and the opinions and decisions reached being then communicated to the patient and/or the family by the referring physician in the presence of the consultant as a means of mutual protection and to avoid any misunderstanding. Strict adherence to this tradition is somewhat impractical and now seldomly followed. However, it is still proper that the opinion, views, and advice of the consultant be communicated to the patient

by the referring physician rather than by the consultant himself, simply because in most cases it is the referring physician who suggests and seeks advice rather than the patient, and it is he who should receive and act upon it except in emergencies where time is an over-riding factor or when the referring physician specifically asks the consultant to communicate his opinions and advice to the patient. The patient should return to the referring physician to hear from him the decisions that have been reached.

As was pointed out previously, the consultant has a right to know all the referring physician knows about the patient and what he, the consultant, is expected to do. If the referral is a complete transfer of the patient, the new physician is then on his own and need not call the referring physician for permission to obtain other consultations or to proceed with treatment; however, unless this transfer is complete it is not proper for the consultant further to refer the patient in a sort of "Tinkers to Evers to Chance" arrangement, or to prescribe or even to initiate treatment for the patient. Here I think is one of the most commonly committed sins. All of us have had the experience of requesting a consultation on a hospitalized patient and having the consultant see and examine the patient at his own convenience, when the referring physician was not present, arrive at a conclusion and then proceed to write orders on the chart to carry out further diagnostic procedures or to initiate therapy. This is a short cut which is tacitly accepted but which very often succeeds in breaking down the complete trust and mutual confidence which is so necessary between consulting physicians. I once sent a patient with a suspected inguinal hernia to a surgeon friend, new in practice, for his opinion with the full intention of asking him to do the herniorrhaphy if indicated. He did return the patient with the opinion that a hernia repair was not indicated, but the patient was now minus two nevi on his face and one on his back, all three having been electrically dessicated by the consultant at his own suggestion. Now I have no doubt that the patient was better off for having lost his nevi, or certainly no worse off, but my Hyfrecator was new and not paid for either,

and these nevi on my patient were out of bounds to the consultant, not because I had any claim staked on them but simply because they were not what the consultation was about. Many have had the experience of having a patient return, after having been seen in consultation, with the statement that the physician to whom he had been referred informed him that the treatment up to now had been wrong, and that the new and most accepted medications for his ailment were those contained in the prescriptions clutched in his hands. I maintain that it is the consultant's right to have and to express his opinion regarding the case that has been referred to him, but it is likewise the referring physician's right to accept or reject the advice and opinion proffered by the consultant. The patient should not be put in the middle by either, nor should he have his confidence in either physician shaken by the other.

Of course it is not always the general practitioner family physician who consults the specialist regarding the management of his patient. Many times the consultations are between specialists within the same specialty or in different specialties, and likewise in many instances the specialist who sees the patient initially for some specific condition needs to consult with the family physician who has seen the patient in the past. These varying conditions of consultation require varied arrangements and understandings, but the same basic premises hold. At this point I think it would be helpful to consider the opinions and reports of the Judicial Council of the American Medical Association in its interpretation of Section VIII of the *Principles of Medical Ethics*, which is specifically concerned with the matter of consultations. Note that in this elucidation of Section VIII no reference is made to the general practitioner, the family physician, or the specialist. It is assumed that any physician can and will be the referring physician, and any physician can and will be the consultant, and that the basic principles apply to all.

I would like to summarize Section VIII of the *Principles of Medical Ethics* for you in support of some of the points I have just made. It states that, "A physician should

seek consultation upon request; in doubtful or difficult cases; or whenever it appears that the quality of medical service may be enhanced thereby." The Judicial Council of the American Medical Association then proceeds to interpret this principle in specific situations. It states that in every consultation the benefit of the patient is of first importance, that when a patient is sent to a consultant and the physician in charge of the case cannot accompany the patient, the physician in charge should provide the consultant with a history of the case, together with the physician's opinion and outline of the treatment, or as much of this as may be of service to the consultant, and that as soon as possible after the consultant has seen the patient he should address the physician in charge and advise him of the results of the consultant's investigations. It further states that when a physician has acted as a consultant in an illness he should not become the physician in charge in the course of that illness except with the consent of the physician who was in charge at the time of the consultation. In delineating the responsibility of the attending physician the Judicial Council clearly is of the opinion that the physician in charge of the case is responsible for treatment of the patient. Consequently he may prescribe for the patient at any time and is privileged to vary the treatment outlined and agreed upon at a consultation whenever in his opinion such a change is warranted. However, says the Judicial Council, after such a change it is best to call another consultation; then the physician in charge should state his reasons for departing from the course decided on at the previous conference. When an emergency occurs during the absence of the physician in charge, a consultant may assume authority until the arrival of the physician in charge, but his authority should not extend further without the consent of the physician in charge.

These *Principles of Medical Ethics*, as they pertain to consultations, would appear to be based on nothing more mysterious than mutual trust, respect, and courtesy between physicians. When the referring physician sends the patient to the consultant with no information or specific request, when he

ignores the advice of the consultant without good reason or belittles it in the presence of the patient, when the consultant receives the referred patient and undermines his confidence in the referring physician, prescribes, treats, operates, or further refers him without the express consent of the referring physician, or fails to promptly report his opinion to the referring physician, then neither trust, respect, or courtesy are a part of the transaction. Without these attributes medicine is not a profession and the practitioner is unworthy of his calling. Respect breeds respect.

Referral is a two way street, and the obligations run both ways. Both consulter and consultant have rights as well as responsibilities. The subject of the consultation is the one for whom both are established. The referring physician should refer for consultation; report any peculiarities or anything unusual he may have told the patient; forward all pertinent information that he has available; select a consultant whose ability and integrity he respects, and then give full support to his opinions and actions. The consulting physician should keep the referring physician promptly and fully informed; return the patient to him as soon as the indicated service is rendered; avoid treating the

patient beyond the call of the indicated service or for any unrelated problem that may arise during the consultation without the express consent of the referring physician. These guidelines may seem almost too obvious to talk about, but they are none the less followed all too infrequently. Physicians are busy people, but no one should be too busy to advance the welfare of his patients or himself.

One final word concerning that essential and indispensable ingredient in any satisfactory and happy physician-patient-physician relationship, from the standpoint of either the patient, the referring physician, or the consultant. Almost everyone admires candor in a physician, but it is quite often more politic to be tactful than it is to be candid. It is usually better to say, "I am sure that if Dr. Smith had not been so terribly overworked he would have arrived at the same diagnosis I did," than to say, "That knucklehead couldn't diagnose his way out of a wet paper bag." Or, "Yes, you went to the only man in the country who could have performed that operation," instead of, "Old Cutandslash is the only man in the country who still does that operation." Remember your diploma only starts you in practice; it is your diplomacy that keeps you there.

\* \* \*

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From the  
Executive  
Director

# THE MEDICAL DIGEST

## News of Interest to Doctors in Tennessee

### How Does TMA Help Doctors in Practice?

● Here's how:

The TMA provides information on important issues affecting physicians, including scientific, business, and socio-economic problems --- Association benefits include the annual meeting, the 132nd to be held April 13-15, 1967, in Memphis, where physicians may further their scientific education, participate in conducting the Association's business, and enjoy the fellowship of their colleagues --- Sponsors conferences in the legislative and socio-economic area --- Exerts leadership to solve medical problems as they arise and serves as an advance clearing house on numerous issues --- Provides a placement service for physicians and communities seeking the services of a physician --- Studies the ever-increasing problems relating to the legislative side of medicine and developing action programs --- Provides office planning guides and practical aids as developed by the AMA --- Continually studies and interprets the regulations and changes occurring in Medicare --- Sponsors six group insurance programs, including sickness & accident, life, major hospital, professional liability, overhead expense, and accounts receivable plans --- Maintains a constant contact with state legislators and members of Congress --- Keeps records on practicing physician members --- Through its headquarters, provides a center for health information available to the public --- Offers scores of other services designed to keep the physician abreast of the times and to help him to practice the best medicine.

### AMA Services

● In answer to the question, "What do I get for AMA dues?", here is a partial list: Four free publications (weekly Journal, choice of ten specialty Journals, AMA NEWS, and Today's Health); answers to medico-legal, socio-economic, and scientific questions; guides to medico-legal forms and authorizations; access to a list of all physicians in the United States; current data on new drugs; physicians' question and answer service; the two largest medical meetings in the World each year, and many special symposia and conferences; up-to-date information on state and national medical and health legislation, reports on developments, and appropriate action on such measures; medical and health careers support and stimulation; guides for starting and/or improving medical practice; representation by 235 delegates to the AMA House are elected by the more than 200,000 physician members of 2,000 local medical societies; coordination of the medical profession's views, needs, plans, and scientific progress through a unified organization.

### Telephone Book Listings

● Considerable misunderstanding seems to exist concerning telephone book listings. According to the Tennessee Licensing Board for the Healing Arts, physicians should designate their field of practice as listed by the Licensing Board. The word, "Clinic" should not be used with a physician's name in his phone book listing.

**TMA Distinguished Service Awards—  
Nominations Should Be Submitted**

● TMA's Board of Trustees established a maximum of three "Distinguished Service Awards" to be made to physician members each year after receiving nominations from county societies, or from any member of the Association. The awards are presented at the annual meeting each April. For information in submitting candidates names, the following criteria should be followed: (1) Any member of TMA in good standing is eligible for nomination, and any member in good standing may nominate a recipient for this award. (2) The nominations for the award will be evaluated by the Board of Trustees and such nominations, with factual supporting data should be filed with the Executive Director of TMA NOT LATER THAN JANUARY 1 preceding the annual meeting. The data should provide: (a) Biographical information on the nominee, including a recent photograph, if possible. (b) Medical education and training of nominee. (c) Professional history, including private practice, specialty training, contributions to medical literature, teaching affiliations, staff connections, etc. (d) Detailed description of a specific or general contribution or accomplishment of the nominee to the advancement of medical science or any of the phases upon which the nomination is to be based. (e) Substantiating evidence of merit including printed materials, publications, articles, and other citations. (3) All nominees for the Distinguished Service Awards will be evaluated with not more than three being made in any one year. (4) The Board of Trustees will present the awards with appropriate ceremony during the annual meeting in April, 1967.

**Favorable Tax Treatment for Self-Employed**

● The 89th Congress closed its session with a spurt of action on measures affecting the medical profession, including the approval of a more favorable tax treatment for self-employed retirement savings.

The Congress liberalized the Keogh Law which has been approved unanimously by the House earlier. This permits self-employed persons such as physicians, to deduct up to 10% of their income to a maximum of \$2,500 in savings in qualified pension plans. Present Law allows only a deduction of one-half of this amount. The new provision, opposed by the Administration, may encourage physicians to set up retirement plans. Medicine had urged Congress to approve the plan to make tax treatment of the self-employed on retirement funds similar to that of salaried employees.

**Reimbursable Rates to Hospitals by the State of Tennessee**

● The comptroller of the Treasury of the State of Tennessee is charged with the responsibility of establishing reimbursable rates to those hospitals that render care to patients under Indigent Hospitalization programs administered by the State of Tennessee. Since actions of the state comptroller may also affect physicians, the comptroller's office has furnished the following information to TMA: "Hospitals in supplying cost data to the State have included the cost of professional services of radiologists and pathologists as part of their overall operating cost. The hospitals in turn collected for these services as a part of their bill to the patient. However, since radiologists and pathologists have begun to bill separately for their services, the State of Tennessee has taken the position not to pay a separate fee to radiologists and pathologists until the respective hospital has notified the comptroller's office that these specialists are billing separately. Once notified of separate billing, the comptroller will make an adjustment in that hospital's reimbursable rates and then authorize the payment of a separate fee for the service of these physician specialists."

**Workmen's Compensation**

● At the present time in Tennessee, nearly twenty-six percent of all workmen's compensation cases and nearly thirty-two percent of total costs are attributed to back injury cases.

# Public Service

THE TENNESSEE TEN

*Hadley Williams, Public Service Director*

## Three Physicians Elected to the General Assembly

- Three physician members of the Tennessee Medical Association have been elected to the House of Representatives of the 85th Tennessee General Assembly.

Dr. John D. Peeples, Jr., of Memphis, a plastic surgeon, will represent the 10th District of Shelby County. Dr. Grailey H. Berryhill of Jackson, an otolaryngologist, is Madison County's Direct Representative and Dr. Dorothy L. Brown of Nashville, a general surgeon, will represent Davidson County's 5th District. Dr. Peeples and Berryhill ran as Republicans and Dr. Brown as a Democrat.

The General Assembly, which will convene in early January, will have 59 Democrats and 40 Republicans in the House. This represents a gain of 15 House seats for the Republicans. The Senate composition will be the same as the 84th General Assembly with 25 Democrats and 8 Republicans.

## Legislative Committee Sponsors Meetings

- The TMA Legislative and Public Policy Committee has been active in sponsoring dinner meetings across the state for contact doctors and members of the General Assembly.

Under the leadership of Dr. Tom E. Nesbitt of Nashville, vice-chairman of the committee, the meetings have proved to be invaluable, affording members of the committee, TMA headquarters staff and the TMA legal counsel an opportunity to become acquainted with the elected representatives.

## TMA Concerned with All Health Care Legislation

- Although the Tennessee Medical Association is not sponsoring any specific legislative proposal, several areas of concern are being discussed and studied.

The TMA House of Delegates at its annual meeting in April adopted a resolution calling attention to the increased injuries and deaths in Tennessee resulting from children under the age of 16 years that are being licensed to operate motor-driven cycles. The National Safety Council reports that while deaths for occupants of all motor vehicles increased 4% in 1965 over the previous year, motorcycle deaths for the same period increased 41.3%. A total of 1,580 deaths occurred in 1965 as a result of motorcycle accidents. Twenty-nine of these deaths occurred in Tennessee with 506 others receiving injuries.

The House of Delegates also expressed interest in seeing a study of the State's Workman's Compensation laws conducted by the Legislative Council Committee of the General Assembly.

Hopefully, an area of considerable concern to all members of the health team and to members of the 84th General Assembly as well, the Nurse Practice Act will not be a problem during the forthcoming session. Revision in the Nurse Practice Act, however, will be recommended. Should legislation be introduced that reflects the position of TMA, and the other allied health organizations that have met with the

Tennessee Nurses' Association on several occasions since the last General Assembly, no opposition will be expressed.

The Legislative Council Committee of the General Assembly has conducted a thorough study of the Nurse Practice Act and concurs with TMA that the composition of the Board of Nursing should not be changed and that the definition of what constitutes the practice of nursing and practical nursing should be broad enough so as not to prohibit or limit current nursing practices due to the extreme shortage of registered nurses.

Members of the 85th General Assembly may be faced with legislation to implement Title XIX of the Medicare law. Specific requirements or recommendations to be made to the Legislature by State officials which would enable a program to be established are not known at this time. The TMA House of Delegates adopted a resolution which favors implementation of Title XIX in Tennessee insofar as the program is fiscally feasible. The guidelines for determination of medical indigency must be realistic and ultimately will be the main factor in establishing a program that will be fiscally responsible.

There is no reason to believe that legislative efforts by the optometrists, podiatrists and chiropractors will not be made. Rarely does TMA have the opportunity to see legislative proposals by these groups prior to introduction. TMA is obligated to oppose any legislation which is not in the best interest of the public and will continue to do so. Groups which seek to achieve by legislation that which they did not receive by education must be opposed in order to protect the public.

#### **First-Aid Station Idea Draws Excellent Response**

- Plans to establish a first-aid station in the Capitol during sessions of the Legislature are still pending. The response to the request for physician volunteers to staff the station has been excellent and indications are that an adequate supply of TMA members willing to devote one day during the legislative session does exist.

Due to a constitutional amendment adopted November 8th which changes the meeting dates of the General Assembly, a re-evaluation of plans for establishing the first-aid station is being made. Under the new system, a 15-day organizational session will begin in early January at which time legislation may be introduced but none may be adopted. A six-week recess will take place followed by a session that may not extend longer than 90 days. Obviously, the number of working days per week will determine into what months the 90-day session will extend.

#### **Film Presentation On Title XIX Available**

- An excellent explanation of Title XIX and all of its ramifications is available from TMA headquarters for presentation at medical society meetings. Produced by the American Society of Internal Medicine, the presentation utilizes a film strip to illustrate how the program will affect the practice of medicine and what physicians should do to insure proper implementation in each state.

Any county medical society wishing to use this material at a regular meeting should contact TMA headquarters. Mr. J. Tom Sawyer, TMA field representative, is available to present this program to any requesting county medical society.

Frankly, most antihypertensives are pretty good if you give an adequate dose. I'm looking for one with a simple regimen so that mix-ups in doses and therefore the chance of side effects are minimized.



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Geigy

# President's Page

## Extended Care Facilities



DR. HUBBARD

Extended care facilities under the Medicare Law (P.L. 89-97) becomes effective on January 1, 1967. Heavy responsibility will again be placed upon physicians to make this aspect of Medicare successful. Physicians will likely be blamed for any failures that develop in this portion of the Medicare program.

Institutions that will be certified as extended care facilities must meet strict requirements and some of these will affect the medical profession. The requirements are:

1. Utilization Review Committees: This committee's requirements will be essentially the same as for general hospitals. It will be required to conduct reviews for long and short term care cases, admissions and emergencies. The Utilization Review Committee shall contain at least two physicians, the same as is required by a general hospital. Extended care facilities can obtain the required physicians from their own medical staff, a general hospital utilization committee, other physicians from an extended care facility, or a committee selected by the county medical society.

2. Emergency Physician Coverage: There must be a physician for emergencies on call twenty-four hours a day.

3. Patient care policies must be developed, supervised and reviewed by at least one physician and one registered nurse.

4. The medical staff must assume responsibility for the execution of policies of the facility or designate such to a physician and a registered nurse.

5. Each patient must be under the supervision of a physician.

6. Physician Certification: A physician must certify that the patient needs to be transferred to an extended care facility. Again physicians, at designated intervals, must re-certify the need for confinement. (Personally, I feel about this certification as I did concerning the certification in general hospitals. As physicians, we should only be required to write an admission note which describes the patient's condition necessitating the confinement in any facility, and at designated intervals as regulated by the general condition of the patient. Additional progress notes describing the condition of the patient may be necessary.)

Following are four other requirements of extended care facilities. They are: (1) The facility must have a transfer agreement with one or more hospitals. (2) The facility must maintain clinical records on all patients. (3) The facility must provide twenty-four hour nursing service with at least one registered nurse on duty at all times. (4) The facility must provide appropriate methods and procedures for dispensing and administering drugs and biologicals.

Conditions for payment are essentially three. (1) That the patient be hospitalized at least three days in a certified hospital. (2) That he is admitted to the extended care facility within fourteen days following his discharge from a hospital. (3) That the admission is for further treatment of a condition for which he received in-patient hospital service.

The extended care facility's coverage includes up to 100 days per "spell of illness." The program pays the entire cost of services for the first twenty days. For the ensuing 80 days, the patient will be required to pay \$5.00 per day toward the cost of covered services.

For additional information, there are two bulletins recommended. They are: "The Physicians Reference Guide to Health Insurance under Social Security," available from Health, Education and Welfare Department; and a pamphlet produced by AMA entitled, "Medicare and the Physician."

President

# THE JOURNAL

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DECEMBER, 1966

## EDITORIAL

### WORLD CITIZEN

The necessity for the physician to assume his responsibilities as a citizen in local, state and national affairs has been emphasized increasingly during recent years. On a limited scale he has been stimulated to think of his international responsibilities as a physician by volunteer service with civilian populations, not only in Viet Nam, but throughout the world. However, on a larger scale, the physician, like other men, must to a greater or lesser extent share the burdens and responsibilities of the world. Fortified by his capacity to heal and prevent disease and with a scientific background in human biology he is especially equipped to help resolve some of the major issues facing mankind. J. Russell Elkinton,<sup>1</sup> editor of the Annals of Internal Medicine, lists three international problems which physicians must consider in depth.

The first is pollution of the environment—the atmosphere, the water supplies, the wil-

derness areas. Since the nomads of the Middle East first decided to settle in Jericho 8,000 years ago, urbanization has created problems. Every physician whether city or county dweller, recognizes that acceleration of industrial activity, use of pesticides and growth of the population all add urgency to these problems. In addition, the rising incidence of chronic respiratory disease and possible long term effects of chemical pollutants further stimulate the physician to considered action.

A recent report of the National Research Council<sup>2</sup> points out that modern man is a user and not a consumer; he is running out of space in which to discard what he has finished using but has not consumed. In this country the average production of solid wastes per person is 8 pounds a day, the liquid wastes are predicted to reach a level by 1980 sufficient to consume all of the oxygen of all the dry weather flow of the 22 major river basins in the United States; the gaseous waste products of the internal combustion engine and industrial processes have already loaded the atmosphere to the limit of tolerable levels in many urban areas. Man must learn to process his waste products and to reuse them. This will require clear sighted technologic and political effort.

Closely bound to the problem of environmental pollution is that of the rapid expansion of the world's population. The number of deaths is dropping while the birth rate goes merrily on. During the past 80 years the population of the world has doubled and is expected to double again by the end of this century. Much more disturbing is the uneven geographic increase so that the undeveloped and economically depressed areas account for more than their share of the rising population. It has been estimated that Latin America will double its population in the next 20 years and, if present rates are maintained for the next 100 years, will multiply the present population by 31 times. The same is probably true of the Middle East, India and China. In many areas receiving foreign aid from the United States the per capita gross national product and the standard of living are now dropping because of the accelerated birth rate. Foreign aid must provide not only self help in food

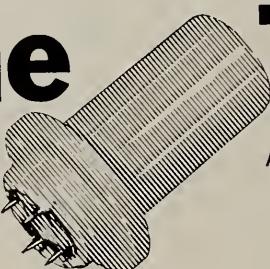
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production but be coupled with emphasis on birth control. Techniques are available for controlling the rising population but tremendous educational, social, moral and religious difficulties remain to be surmounted. The application of technical advances will surely be slow. No one is in a better position than the physician to appreciate the importance of solving this problem in order to stabilize the world's population and so to preserve at a decent level the quality of human life.

Finally, the major threat to the human race that lies in nuclear, chemical and bacterial warfare must be carefully considered. Through the ages precipitous rises in population have been controlled by starvation and wars. No longer is war tolerable for population control or political maneuver. Thermonuclear disaster must be prevented. Weapons are not limited to nuclear warheads and their delivery systems. Both chemical and biologic weapons are stockpiled. Our government forces in Viet Nam are not only destroying food stores but also spraying crops with toxic chemicals. These actions will certainly do far more harm to the young, aged and ailing than the action of the Viet Cong. The moral implications of these decisions to use nuclear, chemical or biologic weapons are frightening. How can activities such as these be reconciled with the compassionate ethical tradition of physicians who for generations have taken the Hippocratic Oath "I will prescribe for the good of my patients . . . and never do harm to anyone. . . . To please no one will I prescribe a deadly drug."

These issues must be resolved. Technologic advances will supply many of the answers, but the challenge is not only in the direction of scientific techniques. Moral, religious, sociological and political advances must also occur. Survival of the human race is at stake and time is running out. These are problems for all men. The physician can contribute most effectively by helping to mold public opinion and interest and concern stimulate others to join him in helping to resolve these issues. If he does not accept the challenge, political, economic and biologic chaos will result. If he does, he can become a most important citizen of the world.

A. B. S.

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#### SENIOR CITIZENS, INC. OF NASHVILLE— AN EXPERIMENT IN PREVENTIVE MEDICINE

In 1956, Dr. Cyrus Ruilmann, Commissioner of Mental Health, called together a committee of citizens to discuss an organization to provide for the development of interests by those who had reached retirement age and on whose hands time hung heavily. As one privileged to be a member of that Committee and subsequently to have a part in the evolution of its program in one capacity or another for a decade, I have found it both educational and rewarding.

Within the year following Dr. Ruilmann's suggestion, Senior Citizens, Inc., of Nashville was established as a pilot project, with a "nest-egg" of financial support from the Department of Mental Health of Tennessee. Under the able directorship of Mr. Sebastian Tine and his staff, and backed by a Board of interested citizens, the program acquired over the years support of the United Givers Fund, the Metropolitan Government and of many citizens and civic organizations of Nashville. All this culminated in the dedication of The Joseph B. Knowles Center on October 30, past—the Center in the remodelled old Tarbox School, purchased and rebuilt by a bequest (The Knowles Fund) to the aged of Nashville and a fund-raising drive among Nashvillians.

Over the decade, active membership has moved from a handful in 1957 to 2500 in recent weeks—another 500 or so have needed to move into the inactive group because of ill health or other reasons. The ages of the members range from 55 to the 80's. Any physician would immediately ask certain questions about the composition of such a group of elderly persons—in other words—who are they? A couple of years ago, in answer to this question I learned that slightly over one-half at that time were widows, that some 20% were married wom-

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The following is a brief precautionary statement. Before prescribing, the physician should be familiar with the complete prescribing information in SK&F literature or *PDR*.

**Precautions:** Use with caution in patients hypersensitive to sympathomimetics or barbiturates and in coronary or cardiovascular disease or severe hypertension. Do not use in patients taking MAO inhibitors. Excessive use of the amphetamines by unstable individuals may result in a psychological dependence; in these instances, withdraw the medication. Use cautiously in pregnant patients, especially in the first trimester. **Side effects:** Insomnia, excitability and increased motor activity are infrequent and ordinarily mild.

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en, and some 27% were men, most of whom were married, a few widowers. At that time 38% were living on Social Security benefits, 22% on pensions, 10% on investment income, 14% were still working and 3% were on Welfare relief. Deaths as anticipated are in the main from "heart, stroke and cancer" practically equally divided among the three.

It is of interest that at the time of deriving these figures only one person in some 1800 members had needed to enter a mental institution. Every doctor would recognize that those joining in group activities are more likely to have such personalities that probably few of them would develop mental disease in any event. Thus, as a statistic this item is meaningless, but it still is of great interest.

As the visitor to the Center observes these oldsters at their chosen avocations,—ceramics, weaving, millinery, wood working, painting in oils or watercolors, in the bridge or canasta class, at the lecture, reading in the library or just carrying on a conversation, one can not help but be impressed and become enthusiastic about how much these things must mean for one at "loose-ends." Statistics aside, one can only consider the alternatives,—rocking in a porch chair, living alone in a rooming house or even in a small home, days on end without the stimulus that accompanies conversation and social intercourse.

Here is preventive medicine of high order—prevention of mental deterioration or disease. The years are not extended but the years of retirement are happier. The aches and pains and progressive physical deterioration are lessened at the conscious level in those occupied in some interesting pursuit. This fact the physician will recognize in his "chronic complainer" daily in his office. (A nurse assigned by the Metropolitan Health Department does hear complaints and advises them to see their physician or visit a hospital clinic, depending upon the circumstances.)

Not only has Senior Citizens, Inc. provided this service to the community but it has contributed in other ways as well. For medical students and student nurses it has provided a demonstration project in mental health. For students in the University

of Tennessee School of Social Work it has provided field experience. Lastly, through grants from the National Institute of Mental Health, Senior Citizens, Inc. has contributed continuously to knowledge and experience in the management of the elderly person and his social problems which, as every physician knows, can hardly be divorced from his medical problems. As past-chairman of the Research Committee the ongoing program in research has provided me with interesting educational experiences. Among these has been the demonstrable success of putting persons aged 60 to the mid-70's of varied educational backgrounds through a 12-week Institute, an intensive course of classroom assignments, seminars, work shops and field work as training for accepting responsibilities in a community's social programs, whether for establishing centers for elderly persons, programs for high school drop-outs, or "head-start" and the like. (The 70 enrollees have come from Tennessee, Kentucky, Florida and Virginia.) Of exceeding interest have been the demonstrations of learning ability in persons of this age who had not been in a classroom for decades.

Thus, Nashville has underwritten and supported a project of service and research which has attracted considerable attention nationally.

R. H. K.



## Special Item

(From the American Medical Association Education and Research Foundation)

"For the past four and a half years, the AMA Education and Research Foundation has been operating a program which guarantees bank loans to those in medical training. More than 30,000 loans, over \$35,000,000 in principal amount have been made to borrowers who needed additional funds for essential living and training expenses.

"During the past year the availability of money for loans of all kinds has declined sharply. Many economists have tried to pinpoint the cause of the shortage of credit. The consensus is that the economy cannot absorb the combined impact of a large domestic welfare program and a war. This

# MOLECULAR REMODELING—

*laboratory exercise or clinical necessity?*

More than twenty-five years have passed since the discovery of the diuretic activity of sulfanilamide started pharmacologists on a succession of molecular remodelings to find the ideal diuretic.

### Diuresis—a sought-after clinical effect from an unwanted side effect

It started in 1937 when a clinician reported that the administration of a sulfonamide was sometimes accompanied by an unexplainable side effect—metabolic acidosis.<sup>1</sup> Three years later the side effect was explained. The sulfonamide radical of sulfanilamide inhibited carbonic anhydrase,<sup>2</sup> the enzyme responsible for converting carbon dioxide and water to hydrogen ions and bicarbonate ions.

Later, other investigators showed by dog experiments that metabolic acidosis probably resulted when the inhibition of carbonic anhydrase upset the exchange of hydrogen and sodium ions, causing increased excretion of sodium as the bicarbonate.<sup>3</sup>

It was twelve long years after the first report of the unexplainable side effect (metabolic acidosis) that it was finally shown that large doses of sulfanilamide administered to edematous patients were indeed capable of promoting diuresis.<sup>4</sup> However, the possibility of toxic effects from its prolonged use and its relatively weak diuretic action made it impractical for clinical use as a diuretic.<sup>5</sup>

Because the inhibition of carbonic anhydrase seemed to be the key to effective diuresis, investigators began to look for more potent enzyme inhibitors—in the hopes that they would be more effective diuretics.

The most important of these early compounds, acetazolamide, enjoyed several years of fairly wide clinical use.

Its carbonic anhydrase inhibitory activity was several hundred times greater than that of sulfanilamide.<sup>6</sup> The increase in inhibitory activity, however, increased not only the excretion of sodium and bicarbonate ions, but also the excretion of potassium.<sup>7</sup> And, like its predecessor, acetazolamide precipitated mild acidosis. Its prolonged use could result in hypokalemic acidosis.<sup>7</sup>

### The 'thiazides'—an answer to the metabolic acidosis caused by carbonic anhydrase inhibition

Despite the fact that the sulfonamide

group appeared to be responsible for carbonic anhydrase inhibition which in turn appeared to be responsible for diuresis, investigators began to synthesize compounds with structural alterations to the sulfonamide group.

The first major breakthrough came with the synthesis of chlorothiazide. Altering the sulfonamide group did indeed alter the ability of chlorothiazide to inhibit carbonic anhydrase—it was only 1/10th as potent as acetazolamide in inhibiting the enzyme.<sup>8</sup> Despite the drop in inhibitory potency, however, chlorothiazide proved to be an effective diuretic—an observation that led to the conclusion that its diuretic action was due to some mechanism other than its action on carbonic anhydrase.<sup>9,10</sup>

For effective diuresis, chlorothiazide was administered in daily dosages ranging from 250 to 2000 mg.<sup>11</sup> It increased the excretion of sodium and chloride; and, to a lesser extent, potassium and bicarbonate.<sup>11</sup> The excretion of potassium appeared to be maximal at higher dose levels at which, theoretically, the carbonic anhydrase inhibitory effect is more active.<sup>11</sup> Its prolonged use, therefore, could sometimes result in metabolic hypokalemic, hypochloremic alkalosis.<sup>7</sup>

### Naturetin—effective diuresis with more favorable electrolyte balance

Other thiazides followed—with improvements being aimed at two particular areas: 1. attempts to increase diuretic action in relation to the milligram potency of the drug, and 2. attempts at a more favorable sodium/potassium ratio in the urine, i.e., to decrease the excretion of potassium while maintaining the excretion of sodium.<sup>12</sup>

One of these, Naturetin, Squibb BENDROFLUMETHIAZIDE, has made advances on both these points. "By adding a 3-benzyl radical to hydroflumethiazide a rather dramatic reduction in dose range is accomplished. With this drug, effective sodium excretion is obtained with

doses between 2.5 and 10 mg., which is a 200 to 1 ratio as compared to chlorothiazide..."<sup>13</sup>

Moreover, due probably to its virtual lack of carbonic anhydrase inhibition, Naturetin (bendroflumethiazide) has been shown to cause less potassium and bicarbonate loss and less alteration in urinary pH than either chlorothiazide or hydrochlorothiazide.

Naturetin is outstandingly effective not only in establishing, but also in maintaining, excretion of retained fluid in edematous patients. And its duration of action is sufficiently prolonged to allow a single daily administration in most patients. Naturetin is also an effective antihypertensive agent.

**Contraindications:** Severe renal impairment; previous hypersensitivity.

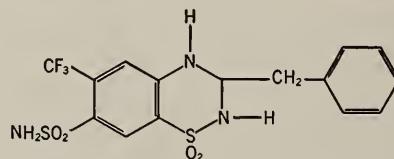
**Warning:** Ulcerative small bowel lesions have occurred with potassium-containing thiazide preparations or with enteric-coated potassium salts supplementally. Stop medication if abdominal pain, distension, nausea, vomiting, or G.I. bleeding occur.

**Precautions:** The dosage of ganglionic blocking agents, veratrum, or hydralazine when used concomitantly must be reduced by at least 50% to avoid orthostatic hypotension. Electrolyte disturbances are possible in cirrhotic or digitalized patients.

**Side Effects:** Bendroflumethiazide may cause increases in serum uric acid, unmask diabetes, increase glycemia and glycosuria in diabetic patients and may cause hypochloremic alkalosis, hypokalemia; cramps, pruritus, paresthesias, and rashes may occur.

**Supplied:** Naturetin (Squibb Bendroflumethiazide) 5 mg. and 2.5 mg. tablets. Also available Naturetin ē K [Squibb Bendroflumethiazide (5 or 2.5 mg.) with Potassium Chloride (500 mg.)]. For full information, see Product Brief.

**References:** 1. Southworth, H.: Proc. Soc. Exper. Biol. & Med. 36:58, 1937. 2. Mann, T. and Keilin, D.: Nature 146:164, 1940. 3. Pitts, R. F., and Alexander, R. S.: Am. J. Physiol. 144:239, 1945. 4. Schwartz, W. B.: New England J. Med. 240:173, 1949. 5. Friedberg, C. K., in Moyer, J. H., and Fuchs, M.: Edema Mechanisms and Management, Philadelphia, W. B. Saunders Co., 1960, p. 259. 6. Cumming, J. R.; Tabachnick, E., and Seelig, M., in Moyer, J. H., and Fuchs, M.: op. cit., p. 254. 7. Werko, L., in Moyer, J. H., and Fuchs, M.: op. cit., p. 188. 8. Beyer, K. H., Jr., in Moyer, J. H., and Fuchs, M.: op. cit., p. 274. 9. Maren, T. H., and Wiley, C. E.: J. Pharmacol. & Exper. Therap. 143:230, 1964. 10. Earley, L. E., and Orloff, J.: Ann. Rev. Med. 15:149, 1964. 11. Fuchs, M., and Mallin, S. R., in Moyer, J. H., and Fuchs, M.: op. cit., p. 276. 12. Ford, R. V., in Moyer, J. H., and Fuchs, M.: op. cit., p. 290. 13. cited in Fuchs, M., and Mallin, S. R. (ref. 11): op. cit., p. 283.



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combination of economic pressures has created a shortage of money, and has forced the banking system to raise the cost of funds (interest rates) and curtail lending. Because of this general curtailment of loans, two of the three banks in the AMA-ERF loan guarantee program have terminated their agreements to lend money through the program.

"It is therefore with sincere regret that we now inform you that the AMA-ERF Board of Directors, meeting on October 28, was forced to curtail the loan guarantee program for a temporary but indefinite period. Effective November 1, loans under this program must be limited to \$750 per borrower per year. This step was necessary in order to spread the limited available funds as far as possible.

"In addition, the interim interest rate will be increased from 6% to 7%. The new rate reflects recent increases in the bank prime rate, now at 6%, and our contract with the bank requires this adjustment.

"For those who wish to make application for loans, the following guidelines will apply:

1. Application material will continue to be available from Deans of Medical Schools and Hospital Administrators. In addition to the normal application forms, all medical students must obtain a statement from the Dean's office attesting to the student's need for the loan.

2. Application material should be sent, as at present, to the Continental Illinois National Bank and Trust Company of Chicago, the institution making loans under this program.

3. Effective November 1, 1966, applicants will be eligible to borrow \$750 per year.

4. The increase in the interim interest rate will apply to new loans. It will not affect loans made previously. The payout interest rate will remain at 7 percent.

At such time as the general economic climate improves, we are hopeful that we can restore the program to its previous level and continue to make a significant contribution to the financial peace of mind of students and physicians in training."

## IN MEMORIAM

**GUTHRIE, NOBEL W.**, Memphis. Died 2 November, 1966, aged 55. Graduate of University of Tennessee College of Medicine, Memphis, 1934. Dr.

Guthrie was a member of the Memphis and Shelby County Medical Society.

**HERBERT, ROGERS NATHANIEL**, Nashville. Died 14 October, 1966, aged 74. Graduate of Vanderbilt University School of Medicine, 1917. Dr. Herbert was a member of the Nashville Academy of Medicine.

**WEST, FRED KARR**, Rossville. Died 3 October, 1966, aged 82. Graduate of College of Physicians and Surgeons, Memphis, 1911. Dr. West was a member of the Consolidated Medical Assembly.

**MIMS, WILLIAM DINGIND**, Memphis. Died 17 October, 1966, aged 71. Graduate of University of Tennessee College of Medicine, 1921. Dr. Mims was a member of the Memphis-Shelby County Medical Society.

**CONYERS, PERCY A.**, Dyersburg. Died 25 October, 1966, aged 68. Graduate of Vanderbilt University School of Medicine, 1923. Dr. Conyers was a member of the Northwest Tennessee Academy of Medicine.

**LEACH, ROBERT S.**, Knoxville. Died 10 October, 1966, aged 72. Graduate of Harvard Medical School, Boston, 1920. Dr. Leach was a member of the Knoxville Academy of Medicine.

**GAMMEL, ZEKE CANDLER**, Donelson. Died 7 October, 1966, aged 68. Graduate of Vanderbilt University School of Medicine, 1925. Dr. Gammel was a member of the Nashville Academy of Medicine, 1947-49.

## PROGRAMS AND NEWS OF MEDICAL SOCIETIES

### Northwest Tennessee Academy of Medicine

The Academy held its monthly meeting at the Union City Country Club on October 25th. The program was presented by Dr. Sam E. Stephenson, Jr., associate professor of surgery, and Dr. Vernon H. Reynolds, assistant professor of surgery, Vanderbilt University School of Medicine. Dr. Stephenson discussed the role of regional medical centers under P.L. 89-239, and Dr. Reynolds gave an excellent scientific presentation on cancer-chemotherapy.

Dr. Robert L. Harrington, applicant for membership in the Academy, was introduced. Dr. Harrington, formerly of Nashville, recently moved to Dyersburg.

**Roane-Anderson County Medical Society**  
Members, wives and their guests attend-

ed the annual Dwight Clark Memorial Lecture, held at the Holiday Inn in Oak Ridge on October 25th. The lecture entitled, "The Perfect Machine—With Special Emphasis on Care and Maintenance of the Biliary Batch Plant," was presented by Dr. Henry C. Dahleen, assistant professor of clinical surgery, Stanford University Medical School, associate professor, San Jose State College, president, San Jose Medical Clinic, San Jose. Dr. Dahleen was formerly a member of the staff of Oak Ridge Hospital.

### Knoxville Academy of Medicine

The program for the meeting of the Academy on November 8th was presented by Dr. John H. Burkhart. The meeting was held in the Academy of Medicine Building.

Mr. and Mrs. Forrest Andrews presented the Academy with a memorial for Dr. Robert Simpson Leach with the request that it be used for a book or books for the Academy Library. "Gonzales—Legal Medicine, Pathology and Toxicology" will be placed in the Library in memory of Dr. Leach.

### Washington-Carter-Unicoi Medical Society

The Society held its regular monthly meeting and election of officers on November 3rd. Dr. Lewis F. Cosby, Jr. was named President-Elect; Dr. John F. Lawson, Vice-President; Dr. Charles O. Parker, Jr., Secretary; Dr. Robert G. Dennis, Treasurer; and Dr. Harmon L. Monroe to the Board of Censors. Dr. Edward M. Campbell, Dr. E. L. Caudill, Jr. and Dr. Ben D. Hall were elected delegates to the Tennessee Medical Association House of Delegates. Drs. Walter A. McLeod, Gilbert A. Rannick, and Charles E. Allen were named alternate delegates.

Dr. Mackinnon Ellis, who has just returned to Johnson City from the Veterans Administration in Martinez, California, was introduced to the Society. Dr. Ellis will be connected with the VA at Mountain Home, Tennessee.

The program consisted of a film presentation entitled "Title XIX of P.L. 89-97" by Mr. Tom Sawyer, Field Representative, Tennessee Medical Association.

### Hamblen County Medical Society

Dr. John C. Burch, Nashville, Chairman of TMA Board of Trustees, professor of Gynecology at Vanderbilt University Medical School, was the guest lecturer at the meeting of the Hamblen County Medical Society on October 4th. Dr. Burch spoke about current methods of management of the more difficult types of gynecological patients, stressing the need for individualization in the physician's approach to his patient.

### Memphis-Shelby County Medical Society

A panel composed of Judge William Leffler, Attorneys John Thomason, Fred Ivy and Frank Hall, discussed Workmen's Compensation Laws at the meeting of the Memphis and Shelby County Medical Society on November 1st. The meeting was held in the auditorium of the Institute of Pathology.

## NATIONAL NEWS

### The Month in Washington (From the Washington Office, AMA)

High on the list of health legislation to be considered by the new Congress convening January 10 are proposals to amend both the medicare and medicaid programs. Proposed medicare amendments would extend the program to the disabled, include podiatrists' services, add out-patient drugs to Plan B, and authorize that billing for services of hospital-based physician specialists be put back under hospitals.

Sen. Russell B. Long, (D., La.), chairman of the Senate Finance Committee which handles medicare and medicaid legislation, is pushing a proposal designed to get physicians to prescribe drugs by generic terms for patients under federally-aided medical programs. Such an amendment died in a conference committee in the final days of the last Congress.

Amendments to limit federal expenditures under medicaid (Title XIX) are expected to get early consideration by the House Ways and Means Committee. The Committee reached agreement on such leg-

islation shortly before adjournment last year, but it was too late to get it through Congress.

One of the final pieces of legislation passed by Congress in 1966 authorizes liberalization of the Keogh law under which physicians get a tax break for savings put in qualified pension plans. The full amount of the \$2,500 annual maximum was made tax deductible. Only half of the amount was tax deductible under the original law. Other health legislation approved by Congress in 1966 includes:

**Group practice**—authorizes federal mortgage guarantees for construction of non-profit group practice facilities.

**Health services**—authorizes the Office of Economic Opportunity (anti-poverty) to make grants for comprehensive health services programs, including birth control. **Public health**—authorizes: (1) \$145 million, one-year extension of PHS programs, including \$125 million for project grants for categorical programs,—states and the PHS are given greater flexibility in spending the money among the various categories and including other "public health" projects; (2) extends the federal-aid vaccination program for three years; and (3) provides for family health services for migratory workers.

**Air pollution**—authorizes a three-year, \$186 million extension of the federal anti-air pollution program and provides broader authority for air pollution control activities by localities.

**Water pollution**—authorizes a \$3.7 billion, four-year program for cleaning the nation's waterways. It includes initiation of a massive program for combatting pollution in major water basins.

**Child care**—prohibits sale of toys containing hazardous substances and strengthens existing law covering household hazardous substances; does not contain a disputed provision covering children's aspirin and other drug controls in the original legislation.

**Narcotics**—permits addicts charged with nonviolent crimes to choose hospital commitment instead of trial, if the authorities agree, or could be sentenced after trial to hospitals for rehabilitation.

**Packaging**—requires that over-the-counter drugs and grocery products bear labels clearly showing the contents, quantity and manufacturer.

**Mental Health**—amends original law to provide grants to assist in the establishment and initial operation of community mental health centers.

**Research laboratory animals**—provides

for federal regulations covering transportation, purchase, sale, housing, care, handling and treatment of such animals.

**Military medicare**—amends existing law to provide for out-patient care in a physician's office and to include retired servicemen and their dependents.

**Allied health professions**—authorizes \$105 million for a three-year program to train more medical technicians, therapists and other allied health workers.



The federal government has launched an extensive program to control and prevent alcoholism. As initial steps, Health, Education and Welfare director John W. Gardner established a National Center for the Prevention and Control of Alcoholism and appointed an 18-member National Advisory Committee on Alcoholism.

In announcing the program, Gardner stated its two major aims: (1) The immediate goal of making the best treatment and rehabilitation services available to those who need them now—through both the stimulation of existing resources and the development of new manpower and facilities. (2) The long-range goal of developing effective, practical, and acceptable methods of preventing alcoholism and excessive drinking in all their destructive forms and developing improved therapeutic techniques.

Milton Silverman, special assistant to the HEW assistant secretary for Health and Scientific Affairs, was named coordinator of the program and executive secretary of the advisory committee.

The National Center will be active in a number of major areas including: basic research, clinical research, education and prevention, consultation and training, and support of local programs.

"It will encourage and support alcohol research in universities and research centers and it will also conduct studies in its own laboratories," Gardner said. "It will not provide treatment for alcoholics, but will concentrate on the support of research, training, and control programs. We realize that a program of this kind cannot stand alone. It needs widespread public understanding and support. We will work with organizations and institutions already making great contributions to the prevention and control of alcoholism. Our objective,

in brief, is to mobilize public and professional efforts on the scale necessary to overcome the blight of alcoholism."

## MEDICAL NEWS IN TENNESSEE

### Tennessee Academy of General Practice

The 18th Annual Scientific Assembly and Congress of Delegates of the Tennessee Academy of General Practice was held in Gatlinburg, November 9-11. Speakers and their subjects were: Dr. Cheves McC. Smythe, associate director of the Association of American Medical Colleges, Charleston—"Bacteriuria, Urinary Tract Infection, and Pyelonephritis, Some Definitions and Management"; Dr. Arthur L. Haskins, professor and head of the department of obstetrics and gynecology, University of Maryland, Baltimore—"Oral Contraception"; Dr. Benjamin F. Benton, assistant professor of surgery, University of Tennessee, Memphis—"The Acute Abdomen"; Dr. Arthur D. Nelson, associate dean, Temple University, Norristown, Pa.—"The G.P.—Present and Future"; Dr. Ralph R. Braund, associate professor of surgery, U. T., Memphis—"Diagnosing Cancer by History and Physical"; Dr. Ted F. Leigh, professor of radiology, Emory University, Atlanta—"Chest Roentgenology for the General Practitioner"; Dr. Edward A. Dunlap, associate professor of ophthalmology, Cornell Medical Center, New York—"The Role of the General Practitioner in Strabismus"; Dr. R. Bruce Logue, professor of medicine, Emory University, Atlanta—"Differential Diagnosis of Chest Pain"; Dr. Edgar A. Haunz, professor and chairman, department of medicine, University of North Dakota, Grand Forks—"Modern Management of Diabetes"; and Dr. Thomas D. Brower, professor of orthopedic surgery, University of Kentucky, Lexington—"Fractures of the Lower Extremities—Office Treatment." A symposium entitled "Adolescence—Perspectives and Problems" was presented by Dr. Nat T. Winston, Jr., Nashville, Dr. Rafael C. Sanchez, director, continuing medical education program, Louisiana State University School of Medicine, New Orleans, and Dr. James A. Burdette, Knoxville.

A social hour, sponsored by Marion Laboratories on November 10th, was followed by the annual TAGP banquet and installation of officers by Dr. Edward J. Kowalewski, chairman of board of directors of the American Academy of General Practice.

Dr. Tinnin Martin, Memphis, assumed the Presidency of the Academy for 1967; Dr. Carson Taylor, Lawrenceburg was named President-Elect, and Dr. John Derryberry, Shelbyville, was re-elected Secretary.

Dr. Julian K. Welch, Jr., Brownsville, was the recipient of the TAGP award for the Outstanding General Practitioner of the year.

### University of Tennessee College of Medicine

The University is officially committed to establishment of a second medical school if the state legislative and governing bodies will approve, and provide the necessary funds. The action was taken at a meeting of the Board of Trustees on October 14th when the Board authorized the University Administration to seek funds from the state with which to begin planning a new medical school, to be located in Knoxville. The Board recognized that if and when a new medical school comes into being, the main medical campus will continue to be in Memphis, with the new school to be considered as a branch of the Medical Units rather than a competitive institution, and with administrative responsibility vested in the Chancellor of the Medical Units. The Board will also continue to strive for improvement of the Memphis facilities.



Dr. Albert W. Biggs, assistant professor of urological surgery, has received a \$21,616 grant from the U. S. Public Health Service for support of his studies into the etiology of prostatitis.

### Meharry Medical College

A three-man interim committee has been appointed by the Board of Trust of Meharry Medical College to administer the school, replacing acting president Dr. Harold D. West, who resigned. Following a six months leave of absence, Dr. West will return to Meharry as chairman of the biochemistry department.

Dr. Robert S. Anderson, chairman of the department of internal medicine, was named chairman of the interim committee and will be assisted by Dr. William H. Allen, dean of the school of dentistry and John M. Sharp, comptroller.

Dr. Daniel T. Rolfe has resigned as dean of the school of medicine and will be succeeded by Dr. Lloyd C. Elam, chairman of the department of psychiatry, as interim dean. Dr. Rolfe will assume the position of dean of admissions and will be working closely with the interim committee.

### Vanderbilt University

Vanderbilt University and MediCenters of America, Inc. have signed a lease making possible construction of a \$1.1 million recuperative care facility adjacent to Vanderbilt Medical Center. The four-story, 173-bed facility will be built, owned and operated by MediCenters. It will be affiliated with Vanderbilt University Medical Center and the Vanderbilt University Hospital medical staff will make up the medical staff of the new MediCenter.

MediCenters of America, Inc. have more than forty franchises throughout the United States with six facilities already in operation. One of these is located in Lewisburg. The second in the state is a 270-bed facility under construction in Memphis and scheduled for completion in the spring. The Nashville project will be the third completed in Tennessee, although several others are planned in the state.

Other units now operating are located in Columbia, S. C., Wilmington and Winston Salem, N. C., Santa Cruz, Calif., and Houston, Texas.



Vanderbilt University's general research clinic, now beginning its sixth year under government funds, has been notified of a renewal of its grant for another seven years, bringing the total for 14 years to over \$11 million. Dr. Elliott V. Newman, research center director, stated that the annual sum is set at \$718,839, however the grants are renegotiated each year due to rising costs.

The clinic contains a 21-bed special area with a full-time staff of nurses, dietitians, engineers, physicians and chemists. Any qualified member of the Vanderbilt School

of Medicine may carry on research in the clinic in any field. These include heart, surgical, infectious diseases, gastro-intestinal, and other ailments.

### Physicians in Tennessee—By Type of Practice Number and Per Cent (May 1966)

Dr. F. L. Roberts, of the Memphis and Shelby County Health Department has had the interest to collect and tabulate the information upon this subject.

There were 3842 physicians registered and 50 were listed as not in practice, leaving 3792 active ones. There were 2845 physicians in active practice in the 8 counties of Anderson, Davidson, Hamilton, Knox, Madison, Shelby, Sullivan, and Washington. This number represents 75.0% of the total. The remaining 947 doctors were divided among the other 87 counties. The median number of doctors in these 87 counties was nine.

There were 33 who listed themselves as teachers without specifying subject taught. Where the subject taught was indicated, the physician was counted under that specialty. These are distributed as follows:

General Surgery	7
Obstetrics	9
Pediatrics	24
Psychiatry	8
Internal Medicine	35
Pathology	11

The other subjects all show two or less as teachers. Distributors by specialty and number is as follows:

Specialty	Number	% of Total
General Practitioners	1146	29.82
Internists	415	10.80
Interns and Residents	388	10.10
General Surgeons	378	9.53
Obstetricians	217	5.64
Pediatricians	217	5.64
Radiologists	118	3.07
Orthopedists	101	2.63
Psychiatrists	98	2.55
Anesthesiologists	94	2.44
Pathologists	89	2.32
Otolologists	84	2.18
Ophthalmologists	83	2.18
Urologists	75	1.95
Not in Practice	50	1.30
Occupational Medicine	48	1.25
Neuro Surgeons	45	1.17
Public Health	42	1.10
Teachers	33	0.86
Dermatologists	31	0.80
Plastic Surgeons	21	0.55
Neurologists	15	0.39
Proctologists	9	0.23
Administrators	7	0.18
Physical Medicine	5	0.13
Specialty Not Listed	2	0.05
<b>TOTAL</b>	<b>3842</b>	<b>99.94</b>

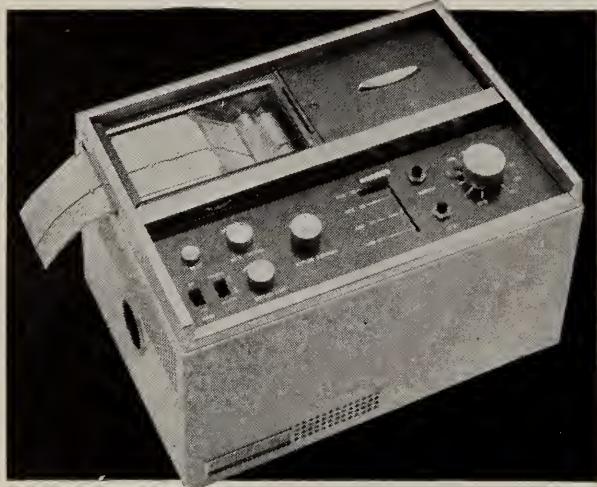
Table I shows the distribution by specialty and location.



\*\* 1 which is Aero Medicine



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## Rural Health Conference

The fourth Tennessee Rural Health Conference, cosponsored by the Tennessee Medical Association, the Tennessee Farm Bureau Federation, Inc., and the University of Tennessee Agricultural Extension Service, was held at the Holiday Inn in Cleveland on October 19th. The major objective of the conference was to improve communication channels between individuals and groups interested in rural health and safety problems.

Program participants were Mr. Lonnie Safley, assistant to the president of the Tennessee Farm Bureau, Columbia; Dr. John H. Saffold, Knoxville, president of the Tennessee Academy of General Practice; and Mr. Robert A. Youngerman, staff associate of the Department of Investigation of the American Medical Association, Chicago. Mr. Safley discussed "The Farmers' Interest in Rural Health Programs." Dr. Saffold's subject was "What's Being Done to Encourage Physicians to Practice in Rural Areas?" and Mr. Youngerman spoke on "Medical Quackery in 1966." Two Hundred Eighty-One physicians, home demonstration club members, extension service personnel, county agents and farm bureau personnel registered for the meeting—a record attendance.

## PERSONAL NEWS

Tennessee physicians who participated in the 60th annual meeting of the Southern Medical Association in November were: **Drs. Wm. H. L. Dornette, John B. Dorian, Samuel L. Raines, Jack D. Pigott, Robert M. Ruch, L. C. Ogle, Stewart A. Fish, Ralph S. Hamilton, Wm. B. Wood, R. A. Calandruccio, W. Likely Simpson, Sam H. Sanders, H. Colby Gardner, Samuel Phillips, W. D. Sutliff, G. Daniel Copeland, Memphis; Dr. Harrison O. Bourkard, Jr., Knoxville; Drs. Lee R. Minton, Jas. H. Elliott, Thos. F. Parrish, Jerrall P. Crook, Paul H. Ward, Perry F. Harris, Wm. L. Downey, Robert C. Owen, J. Lynnwood Herrington, John L. Sawyers, Bob B. Carlisle, Julia E. Sawyers, Sam E. Stephenson, and Robert A. Goodwin, Nashville.**

**Dr. David P. McCallie** discussed "The Health Problems of Administrative Managers" at a recent meeting of the Chattanooga Chapter of Administrative Management Society.

**Dr. Alvin J. Ingram**, Memphis, has been reappointed by the Governor of Tennessee as a member of the Advisory Committee to Crippled Children's Service.

**Dr. J. R. Rogers**, formerly of Knoxville, has been added to the staff of the Medical Arts Clinic in Lewisburg.

**Dr. Sam P. Patterson**, associate professor of Ob-Gyn, University of Tennessee College of Medicine, Memphis, presented a paper at the Central Association of Obstetricians and Gynecologists, held recently in Biloxi. Title: "Breech presentation in the primigravida."

**Dr. Robert Strang**, Kingsport, was the featured speaker at a meeting of District Five of the Tennessee Nurses' Association on October 4.

**Dr. Elliot V. Newman**, professor of experimental medicine at Vanderbilt University, began a four-year term in October as a member of the National Advisory Heart Council. Dr. Newman will make recommendations to the surgeon general on programs of the National Heart Institute established by Congress in 1948. He will help review requests from nonfederal institutions and individuals for research and training grants in the field of disease of the heart and circulation.

**Dr. Walter Derryberry** has opened an office for medical practice in Cookeville. His practice will be limited to gynecology and obstetrics.

Twenty-two Tennessee surgeons were inducted as Fellows into the American College of Surgeons during the annual five-day clinical congress in San Francisco. They were: **Dr. Harry W. Bachman, Jr.**, Bristol; **Drs. Durwood L. Kirk and Don J. Russell**, Chattanooga; **Dr. Dawson W. Durrett, Jr.**, Clarksville; **Dr. Lynn A. Warner, Jr.**, Dyersburg; **Dr. Clarence Driver**, Jackson; **Drs. Louis G. Britt, R. A. Calandruccio, Rufus E. Craven, Hector S. Howard, Ralph H. Monger, Jr., John P. Nash, Edwin N. Rise, and Dan J. Scott, Jr.**, Memphis; **Dr. Nasser Shahbazi**, Mountain Home; **Drs. Wm. C. Alford, Jr., S. K. Brockman, Edward W. Browne, Jr., George K. Carpenter, Jr., Harold C. Dennis, Jr., and Duncan A. Killen**, Nashville; **Dr. Wm. G. Rhea, Jr.**, Paris.

**Dr. I. Frank Tullis**, Memphis, recently addressed the Third National Congress on Medical Quackery held in Chicago on the subject, "Obesity, a Growing Problem." The Congress was sponsored by the AMA and National Health Council.

**Dr. Harold B. Boyd**, professor and chairman of orthopedic surgery, UT Medical Units, recently returned from a meeting of Societe Internationale De Chirurgie Orthopaedique Et De Traumatologie (SICOT) in Paris, France. Dr. Boyd served as moderator of a symposium and as director of a round table discussion on "Diagnosis of Post-Traumatic Necrosis of Femoral Head."

**Dr. R. R. Crowe**, Nashville, director of Metropolitan Hospitals for the past three years and an employee of Davidson County for 38 years, has applied for retirement.

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Edward E. Cale, Jr., M.D.

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Internist

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R. Lindsay Shuff, M.H.A.

Asst. Administrator

**Clinical Psychology:**

Thomas C. Camp, Ph.D.

Cardestral McGraw, Ph.D.

David L. Strahley, Ph.D.

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**Mental Health Clinic**

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Pierce D. Nelson, M.D.

Phone: 328-2211

## ANNOUNCEMENTS

### Calendar of Meetings, 1967

#### State

- Feb. 15-17      Mid-South Postgraduate Medical Assembly, Sheraton-Peabody Hotel, Memphis
- April 13-15      Tennessee Medical Association Annual Meeting, Sheraton-Peabody Hotel, Memphis

#### Regional

- Jan. 20-21      American College of Surgeons, Arizona Chapter, Arizona Inn, Tucson
- Feb. 13-16      Medical Society of the State of New York, Americana Hotel, New York City
- Feb. 15-19      Atlanta Graduate Medical Assembly, Atlanta Marriott Motor Hotel, Atlanta
- Feb. 23-25      Central Surgical Association, Pittsburgh-Hilton Hotel, Pittsburgh, Pa.
- March 6-9      New Orleans Graduate Medical Assembly, Roosevelt Hotel, New Orleans
- March 16-18      Southern Society of Anesthesiologists, Fort Sumter Hotel, Charleston, S. C.
- March 20-23      Southeastern Surgical Congress, Americana Hotel, Bal Harbour, Florida

#### National

- Jan. 13-14      American Society for Surgery of the Hand, Jack Tar Hotel, San Francisco
- Jan. 14-19      American Academy of Orthopaedic Surgeons, Civic Auditorium, San Francisco
- Jan. 23-25      Society of Thoracic Surgeons, Muehlbach Hotel, Kansas City, Mo.
- Feb. 15-19      American College of Cardiology, Washington Hilton Hotel, Washington, D. C.
- Feb. 18-22      American Academy of Allergy, Holiday Inn—Riviera, Palm Springs, Calif.
- Feb. 26-March 4    American Society of Clinical Pathologists, Dunes Hotel, Las Vegas
- March 12-15      International Academy of Pathology, Sheraton Park Hotel, Washington, D. C.
- March 19-24      American College of Allergists, The Roosevelt, New Orleans

### College of Cardiology Plans Annual Session in February

The American College of Cardiology will hold its 16th Annual Session February 15-19, 1967 in Washington, D. C. The five days of scientific presentations on research and clinical advances will be held at the Washington Hilton Hotel. The session will be a gathering place for national and international scientists and clinicians in the field of cardiovascular diseases. Highlights will include a panel discussion on "Controversies in Cardiology" and a symposium on space medicine. Other scientific features will include individual participations in demonstrations of electrocardiographic and computer diagnoses of heart disease.

The College will present its annual Young Investigators' Awards totaling more than \$2,000 during the meeting to outstanding young cardiologists who present their research papers there. The annual Convocation will be held during the session to induct new Fellows of the College.

Other features of the session will include more than 50 luncheon panels and fireside conferences. For information: William D. Nelligan, Executive Director, American College of Cardiology, 9650 Rockville Pike, Washington, D. C. 20014.

### Postgraduate Courses American College of Physicians

The following postgraduate courses of the American College of Physicians will be presented in 1967:

- |            |  |
|------------|--|
| Jan. 16-20 | "Basic Mechanisms of Renal Disease," Cornell University Medical Center, and New York Hospital, New York  |
| Jan. 23-27 | "Current Concepts in Blood Disease, University of Miami School of Medicine, to be held at the Fontainebleau Hotel, Miami Beach, Fla.           |
| Jan. 30    | "Newer Aspects of Experimental and Clinical Allergy, Harvard University Medical School, to be held at the Sheraton-Boston Hotel, Boston, Mass. |
| Feb. 3     | "Biochemical Lesions in Internal Medicine," Washington University School of Medicine, St. Louis, Mo.   |
| Feb. 6-10  | "Arthritis and Related Disorders," New York University Medical Center, New York  |
| Feb. 27    | "Recent Advances in Cardiovascular Disease," The Mount Sinai Medical Center, New York  |
| March 3    | "Physiological Aspects of Cardiopulmonary Disease," Yale University-New Haven Medical Center, New Haven, Conn.                                 |
| Mar. 6-10  |  |
| Mar. 13-17 |  |

Mar. 20-24	"Fundamental Concepts of Gastroenterology, University of Michigan Medical Center, Ann Arbor, Mich.	May 22-26	"Clinical Applications of Recent Advances in Electrophysiology of the Heart," New York University School of Medicine and Medical Center, New York.
Mar. 27-31	"Psychiatry for the Internist," Wayne State University School of Medicine (Lafayette Clinic) Detroit, Mich.	June 12-16	"Internal Medicine: Current Physiological Concepts in Diagnosis and Treatment," University of Cincinnati College of Medicine, Cincinnati, Ohio
May 8-12	"Clinical Auscultation of the Heart," Georgetown University Hospital, Washington, D. C.	June 19-21	"Clinical Applications—Recent Advances in Pharmacology, University of Iowa, Iowa City
May 15-19	"Recent Advances in Clinical Endocrinology, University of Washington, Seattle, Wash.		

T M A

**THE VIEWING BOX****AMA Council Devotes Much Study To the Desirability of Labeling Drugs**

In bygone days the art of medical practice, of necessity, took precedence over the application of scientific knowledge. Doctors of yesteryear were not inclined to reveal to their patients the identity of the medications they prescribed. Now, however, with remarkable pharmaceutical discoveries commonplace, this custom is gradually changing. Increasing numbers of physicians are requesting pharmacists to specify on prescription labels the names and strengths of the drugs ordered.

The American Medical Association's Council on Drugs has studied this matter carefully in recent years, and continues to do so. The position now taken by this Council is one of encouraging all doctors to request labeling as a matter of routine. This Council suggests that label information need be restricted only when such disclosure would have a detrimental bearing on the patient's condition.

These factors are ones which have been advanced to fortify the case for placing the identity of medications on the label:

The patient has the right to be informed about his illness and the medications prescribed for him.

In emergency situations, such as accidental poisoning, overdosage, or attempted suicide, immediate identification of a prescription drug from the label may be lifesaving.

The information on the label is invaluable when the patient changes physicians, moves to another locality, or contacts the prescribing physician at a time when his records are not readily available.

The information is of value in group practices in

which the patient may not always have the same attending physician.

The information is useful to patients with allergies who should know what is being prescribed.

This information on the label helps to prevent mix-ups between two or more drugs being taken concurrently, or between medications being taken by different members of the family.

This information would be valuable should it become necessary to issue a warning against the use of a particular drug; the name on the label would serve as a danger signal to those who have been given prescriptions for the product.

In advocating the labeling of prescriptions as a general practice, the AMA Council on Drugs initially recommended the use of prescription pads on which appear boxes into which the physicians might place a check indicating "yes" or "no" on whether to label; if these boxes were left unmarked by the physician, it was suggested the prescription be labeled.

This position has received a favorable response from many; others have questioned it. The Professional Relations Committee of the American Pharmaceutical Association feels that unless a physician specifically requests labeling the pharmacist should not of his own volition, or upon request of a patient, disclose the ingredients in the prescribed medication. This supports the contention of the pharmacist who believes he needs a directive from the physician to label; the doctor, in other words, should retain and use his authority in making such a decision.

Physicians and pharmacists who oppose labeling as a routine procedure do so, ac-

cording to the AMA Council, for some of the following reasons:

The practice may lead to self-medication and to "patient-prescribing" for others.

A patient who knows the drug name may compare prices at different pharmacies, and thus tempt pharmacists to bid for business on a price basis rather than on the basis of professional service.

The information may only confuse and trouble the patient.

The practice reduces the stature of the physician and lowers the status of the prescription to practically that of an over-the-counter item.

Patients may put other drugs into bottles labeled with the previous contents, which may then lead to charges that a pharmacist dispensed the wrong medication.

Labeling could make it easier to channel drugs into illegal markets.

The AMA's Drug Council believes the advantages of labeling outweigh the objections; it does, however, recognize that there are occasions when such labeling is inadvisable for psychological or other reasons, and it should be the responsibility of the physician to recognize these and take appropriate action.

Only in exceptional circumstances, the Council contends, is it desirable not to reveal the identity of prescribed drugs under today's conditions. Moreover, the Council feels the physician's explanation to his patient regarding the purpose of a prescribed drug and what may be expected from it, together with the public's growing awareness of the effects of drugs—both beneficial and harmful—will help to minimize problems that may occur occasionally.

Consultations with officers of the national pharmaceutical organizations have been held and, after deliberations subsequent to these meetings, the AMA Council continues to believe it is in the best interest of the patient for the prescription container, as a rule, to be labeled with the name and strength of the drug. The Council has revised the "yes"-“no” box approach however, and it now recommends the use of two sets of prescription blanks by the physician. One of these blanks is for routine use and is imprinted with an order to label. The other is

for use on those occasions when labeling is considered inadvisable. This procedure is consonant with the ethics of medicine and pharmacy, and it leaves with the physician the responsibility for deciding whether the prescription label should or should not identify the drug.

It is, furthermore, advocated that the physician always designate the number of refills he wishes the patient to have, and that he prescribe only the number of doses usually required in any specific condition, since adjustments in dosage are often necessary to obtain the desired result in individual cases. It has also been recommended that any prescription not showing the number of refills, or labeled "p.r.n." or "ad lib," not be refilled.

The Drug Abuse Control Amendments recently passed by Congress regulate the refilling of prescriptions for stimulant and depressant drugs. No prescription for drugs in these classes can be renewed more than five times, or more than six months after the date of issue, unless the physician gives additional authorization for refilling.

The physician's responsibility for the medication regimen of his patient is clear, and he should therefore heed the pharmacist's requests for specific instructions on renewals.

Within the Iowa Medical Society there exists an Interprofessional Activities Committee which devotes its time to consideration of matters such as this. This Committee has a counterpart body in the Iowa Pharmaceutical Association with which it meets periodically. Together they seek to resolve questions—such as the labeling and refilling of prescription drugs—in a manner which is *In the Public Interest*. These representatives of two of the health professions are anxious to have the observations of and the cooperation of all physicians, pharmacists, and other health personnel on important health questions such as this.

(Reprinted from the *Journal of the Iowa Medical Society*, October 1966.)

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Mrs. James Lester, Publicity Chairman

### OUTLOOK NASHVILLE

#### A New Approach to an Old Problem

During World War II, the medical profession made tremendous strides in the physical and emotional rehabilitation of its disabled veterans. The paramedical teams were remarkably successful in their endeavor to orient these persons socially and vocationally. However, the veterans returned to families and communities who were unprepared to receive the changes brought about by disabilities. Parents and relatives often felt that the handicapped required nursing and indulgence, and deserved to be waited upon in order to assure adjustment and happiness. Exercises and daily living activities fell into disuse. Hospital learned participation was lost to family compensation. Many of the associates of the disabled persons tried hard to make up for the disabilities and were not aware that they had interfered with medical progress.

Even when families and close contacts were familiar with the rehabilitation process, the veteran met a community which had not made the necessary adjustment. The lack of this adjustment created an inability for him to realize the former hospital program to the full advantage. Steps which should not have been a problem became "ten feet high." He was either over-protected by the desire to help, or ignored in the fear of the wrong approach. The employer did not understand the absence of a faculty did not prevent job efficiency. Much had been done to help the veteran but not enough.

Just as the community proved to be a breakdown in the post-war rehabilitation program, it plays a major part in the lives of a number of individuals. These persons are disabled from birth, accidents, or disease and make up the other part of the population of the handicapped. They face similar problems of the veterans. Sometimes their problems are even more disheartening. After medical help . . . then what?

Outlook Nashville was born of an idea of a new approach to an old problem. It is an organization made up of handicapped persons, some member of a family of a loved one, any individual or group interested in helping handicapped persons fill a normal role at home and in the community. It is what its name implies: keeping on the "outlook" for opportunities for the handicapped in many areas of endeavor.

The Davidson County Medical Auxiliary has joined forces with Outlook Nashville. Because of the miracles manifested and currently recognized not only in the state but nationally, a series of articles will be published as part of an orientation program in order that others may institute constructive help for the handicapped. A whole new resource of mind and industry is being discovered. People are being trained to accept the handicapped and are finding interest in careers in health and rehabilitation. Families are finding relief of stress by the help of others and in turn are becoming better influences in the lives of the disabled. Many will find that TV is no longer a baby sitter but an educational device and that the telephone can be a friend.

Those who would like information concerning this project prior to succeeding articles may receive it by mailing a request to: Outlook Nashville, Inc., 1313 Dickerson Road, Nashville, Tennessee 37207.

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## 1966 MEMBERS OF TENNESSEE MEDICAL ASSOCIATION

The list of members of the Tennessee Medical Association is published in compliance with a provision of the Constitution and By-Laws. The data is accurate as of December 10, 1966. They are arranged in the following order:

### List of active members.

### Counties arranged alphabetically.

ANDERSON COUNTY	Carl Rogers C. T. Stubblefield Sara Womack	Hays M. Mitchell E. Harris Pierce Wm. I. Proffit John A. Rogness Win. R. Smith W. C. Stanberry S. J. Sullivan Claud H. Taylor James R. Thurman Madison S. Trewhitt J. R. Van Arsdall Gilbert A. Varnell
E. L. Parrott <i>Clinton</i>	BENTON COUNTY	CAMPBELL COUNTY
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Norris S. G. McNeeley	Pikeville Thomas G. Cranwell (Mbr. Hamilton Co.)	J. D. Crutchfield M. L. Davis P. T. Howard P. J. O'Brien John C. Pryse R. C. Pryse L. J. Seargent Burgin H. Wood
Oak Ridge Gould A. Andrews Robt. P. Ball R. R. Bigelow Louis Bryan Alex G. Carabia Chas. Congdon John P. Crews Dexter Davis John D. DePersio Robt. E. DePersio Armando DeVega J. L. Diamond C. Lowell Edwards Earl Eversole T. Guy Fortney Seaton Garrett (Mbr. Knox Co.)	BLOUNT COUNTY	CANNON COUNTY <i>Woodbury</i>
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Etna Little Palmer Lewis F. Preston William W. Pugh Charles J. Ragan Thos. L. Ray Hyman M. Rossman Henry B. Ruley Kyle O. Rutherford Edward R. Seiler C. W. Sensenbach Paul E. Spray George M. Stevens Charles R. Sullivan Daniel M. Thomas Joe E. Title Elsie V. Tompkinson Andrew S. Wachtel David A. White Gino F. Zanolli	Louisville Beulah M. Kittrell Maryville Billy Blanks J. H. Bowen H. A. Callaway, Jr. James M. Callaway J. W. Christofferson Mary D. Cragan W. C. Crowder William W. Crowder Lynn F. Curtis W. N. Dawson Ted L. Flickinger R. H. Haralson, Jr. James T. Holder Cecil B. Howard H. L. Isbell E. P. Kintner Samuel S. Lambeth Julian C. Lentz, Jr. Robert F. Leyen F. S. Lovingood Kenneth W. Marman D. L. McCroskey N. A. McKinnon, Jr. J. F. Manning James H. Millard, Jr. L. Q. Myers Robert D. Mynatt J. S. Phelan G. Tom Proctor James N. Proffitt Robert D. Proffitt B. P. Ramsey O. L. Simpson, Jr. H. Trent Vandergriff Lowell E. Vinsant John A. Yarborough	Russell E. Meyers (Mbr. Rutherford Co.)
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		<i>Tazewell</i>
		Fred Reed (Mbr. Knox Co.)
		<i>New Tazewell</i>
		Wm. N. Smith (Mbr. Campbell Co.)

Towns in each county arranged alphabetically and the members in each town arranged alphabetically.

List of members residing outside the state arranged alphabetically.

### List of veteran members.

List of members who have died in the year 1966.

Jean C. Tarwater (Mbr. Knox Co.)	<i>Madison</i>	Richard D. Buchanan
CLAY COUNTY	Joe Gary Allison	John C. Burch
<i>Celina</i>	James E. Burnes	Joseph G. Burd
Champ E. Clark (Mbr. Overton Co.)	William J. Card	Henry Burk
Billy C. Nesbitt (Mbr. Cumberland Co.)	Sam W. Carney, Jr.	R. E. Burr
COKE COUNTY	Frederick B. Cothren	George R. Burrus
<i>Newport</i>	Hillis F. Evans	Roger B. Burrus
Robert R. Henderson	Julian C. Gant	B. F. Byrd, Jr.
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Fred M. Valentine	Robt. L. Pettus, Jr.	George K. Carpenter
Fred M. Valentine, Jr.	Joe E. Sutherland	G. K. Carpenter, Jr.
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<i>Manchester</i>	Harry Witztum	Anthony D. Casparis
William D. Calhoun	<i>Madison College</i>	Norman M. Cassell
Clarence H. Farrar	Cyrus E. Kendall	Lee F. Cayce
Howard A. Farrar	<i>Nashville</i>	Robert L. Chalfant
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<i>Tullahoma</i>	Benton Adkins	Amos Christie
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Earl E. Roles, Jr.	Edwin B. Anderson	John Richard Collins
C. C. Snoddy	H. R. Anderson	Paula F. Conaway
Chas. Harry Webb	James E. Anderson, Jr.	George E. Cooke
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R. W. Mayfield	Harry Baer	Jerrall P. Crook
Wm. R. Sullivan	J. Mansfield Bailey	R. R. Crowe
CUMBERLAND COUNTY	Thurman Dee Baker	E. Perry Crump
<i>Crossville</i>	Sidney W. Ballard	W. Andrew Dale
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Stuart P. Seaton	Edmund W. Benz	Wm. D. Donald
<i>Pleasant Hill</i>	Stanley Bernard	Earl D. Dorris
Margaret K. Stewart	John H. Beveridge	Robert T. Doster
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	H. B. Brackin, Jr.	E. Wm. Ewers
	Cloyce F. Bradley	Don L. Eyler
	G. Hearn Bradley	Roy C. Ezell
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		John H. Foster
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		Richard France
		Horace M. Frazier
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DECATUR COUNTY	
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Paul Teague	
DEKALB COUNTY	
Alexandria	
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DICKSON COUNTY	
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Newbern	
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Trimble	
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FAYETTE COUNTY	
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Jack C. Smith	
Shelby O. Turner	
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Cowan	
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<i>Huntland</i>
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<i>Sewanee</i>
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(Mbr. Coffee Co.)
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<i>Winchester</i>
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Reynolds Fite
Gerald E. Johnson
George L. Smith
James Van Blaricum
<b>GIBSON COUNTY</b>
<i>Dyer</i>
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<i>Humboldt</i>
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A. H. Fick
Wm. H. Roberts
Jas. D. Rozzell
George E. Spangler
<i>Medina</i>
Robert Morris
<i>Milan</i>
H. P. Clemmer
James O. Fields
F. L. Keil
James H. Williams
Philip G. Williams
<i>Trenton</i>
Edw. C. Barker
E. C. Crafton
James W. Hall
Bob G. Thompson
<b>GILES COUNTY</b>
<i>Ardmore</i>
C. B. Marshall (Mbr. Lincoln Co.)
<i>Pulaski</i>
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R. R. Dinella
K. M. Kressenberg
W. H. Murray
W. K. Owen
J. U. Speer
D. M. Spotwood
<b>GRAINGER COUNTY</b>
<i>Rutledge</i>
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T. J. Hill (Mbr. Hamblen Co.)
<b>GREENE COUNTY</b>
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Robert S. Cowles, Jr.
Luke L. Ellenburg
Haskell W. Fox
R. B. Gibson
Hal Henard
N. P. Horner
C. D. Huffman
A. K. Husband
Ben J. Keebler
C. B. Laughlin
Haskell B. McCollum
James R. McKinney
Kenneth C. Susong
<i>Moshheim</i>
I. Dale Brown
G. R. Evans
<b>HAMBLEN COUNTY</b>
<i>Morristown</i>
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Lee R. Barclay
M. J. Bellaire

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John D. Caldwell  
Kemp Davis  
Donald R. Dees  
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Crampton H. Helms  
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Doyle E. Currey  
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Durwood L. Kirk	Marjorie Tepper			Wm. F. Gallivan	Harry K. Ogden
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Willis E. Lemon	Minnie R. Vanc			Chas. Frank George	Jarrell Penn
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Philip H. Livingston	Roger G. Vieth			Carl E. Gibson	Ira S. Pierce
Ira M. Long	Gus J. Vlasis			Robt. B. Gilbertson	Cecil E. Pitard
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MacNaughton, Jr.	Robert A. Waters			James R. Guyton, Jr.	H. Hammond Pride
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Fred E. Marsh	George G. Young			T. Edward Acuff	Joe L. Raulston
Cooper H. McCall	Luther F. Young			Robert L. Akin	Freeman L. Rawson
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	Shed H. Caffey	Daniel F. Fisher	Wiley Carter Hutchins	John P. McGraw	James H. Price
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H. E. Atherton	James H. Collins	James H. Collins	Jerry Ray Kennedy	Gordon K. Rogers	Gordon K. Rogers
Leland L. Atkins	Frank H. Collins	Frank H. Collins	Henry G. Kessler	E. W. Rosenberg	E. W. Rosenberg
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B. F. Benton	Thomas A. Currey	Thomas A. Currey	Robert D. Gorley	Jerome Schriff	Jerome Schriff
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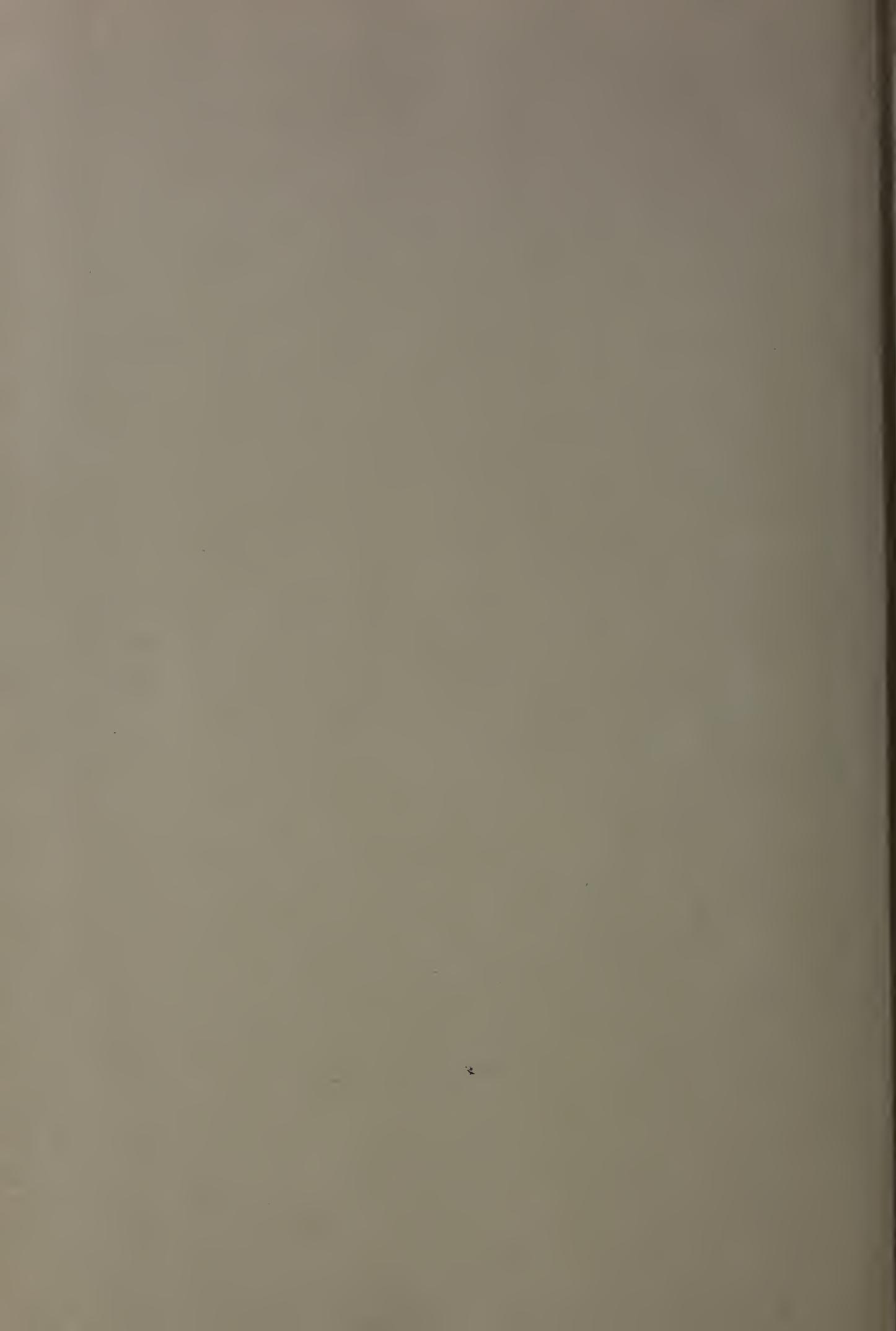
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